# Carpentry
# 2016

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# Introduction

- The aim of the work is to analyze the aggregate performance of companies operating in metal construction for the construction industry (metalwork) over a seven-year period, from 2009 to 2016.
- Companies' performance was analyzed considering four profiles: growth, profitability, productivity and financial structure. An analysis of the sustainability of the companies' business models was conducted by comparing growth, profitability and soundness.
- The work is divided and in two parts:
  1. Analysis of the growth, profitability, productivity and financial structure performance of the aggregate sample;
  2. Focus on larger companies with a turnover in excess of 10 million Euros;

# The companies analyzed

- he sample consists of 105 companies with an aggregate turnover of just under 1.6 billion Euros. The smallest company has a turnover of 360,678 Euros, the largest of 425,786,146 Euros.
- The sample includes 32 companies with revenues in excess of ten million euros.
- Overall, the companies employ 5,910 people, with about 56 employees per company.

## Sample analyzed

| | |
|---|---|
| Companies | 105 |
| Sample aggregate turnover | 1.581.019.773 € |
| Average turnover | 15.057.330 € |
| Average number of employees | 56 |

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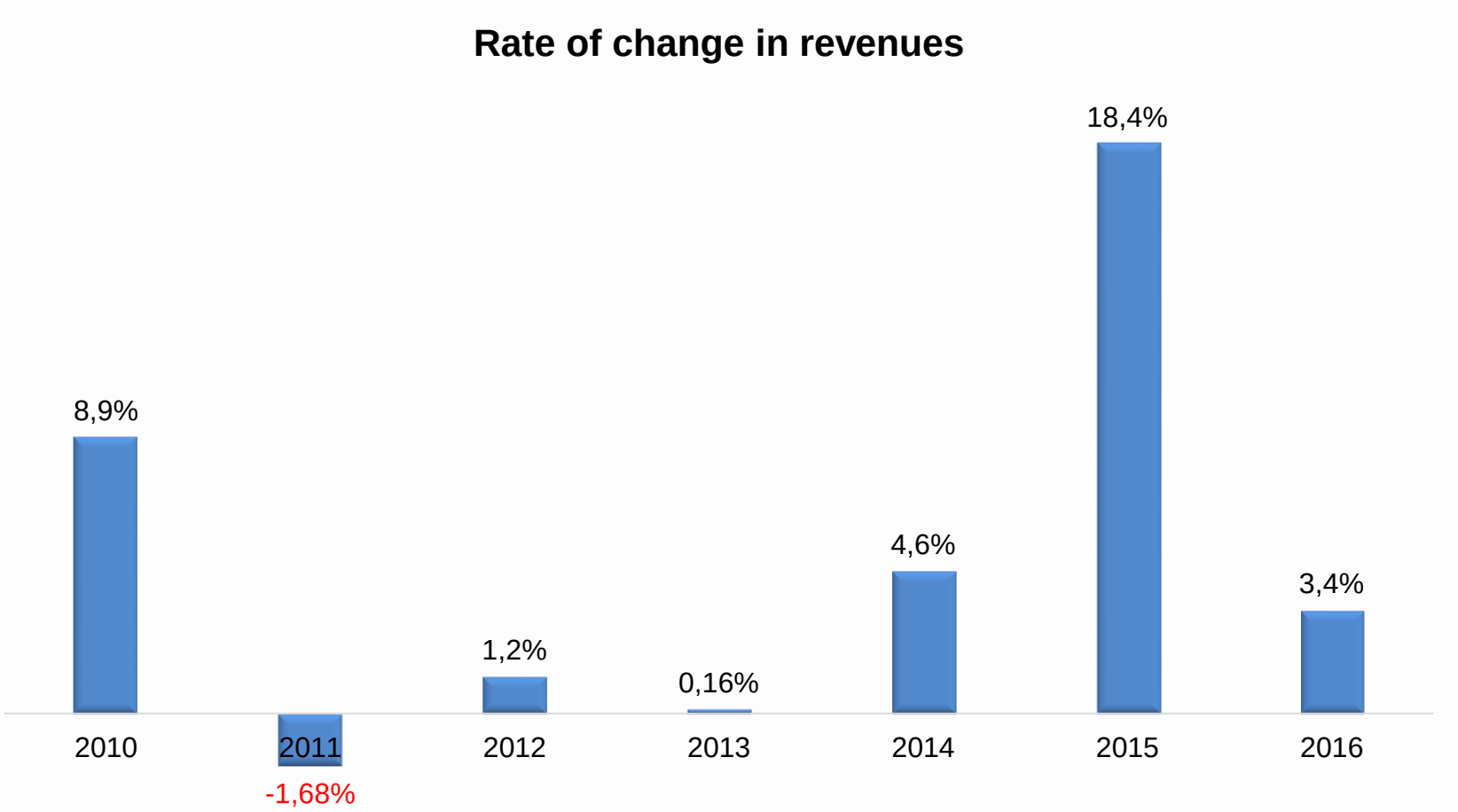
# Aggregate Performance Analysis

# Growth

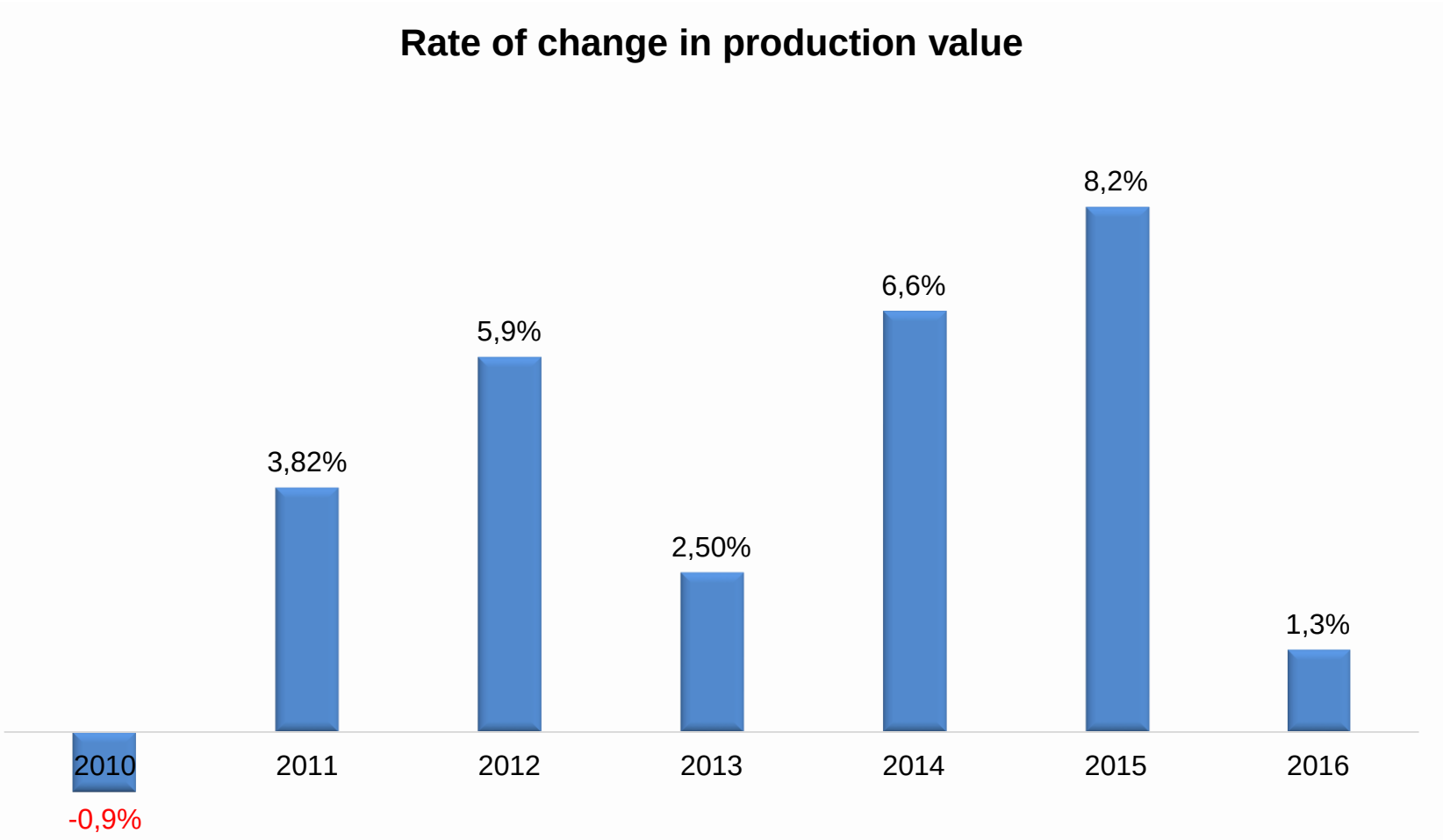
- In 2016, revenues grew by 3.4%. Over the 2009-2016 period, revenues grew at an average annual rate of 5%. The CAGR for the period is 4.8 with substantial revenue growth in 2015 and 2016.
- The value of production grew at a rate of 1.3% in 2016; a lower value considering the previous two years in which the value of production grew an average of 7%.
- Average employees per firm increased from 47 in 2009 to 56 in 2016. From 2012 to 2014 there is a situation of substantial stability. Since 2015 there has been an increase in average employees with a peak in 2016, the year in which there is the highest number of employees compared to the entire period considered (56).

# Growth

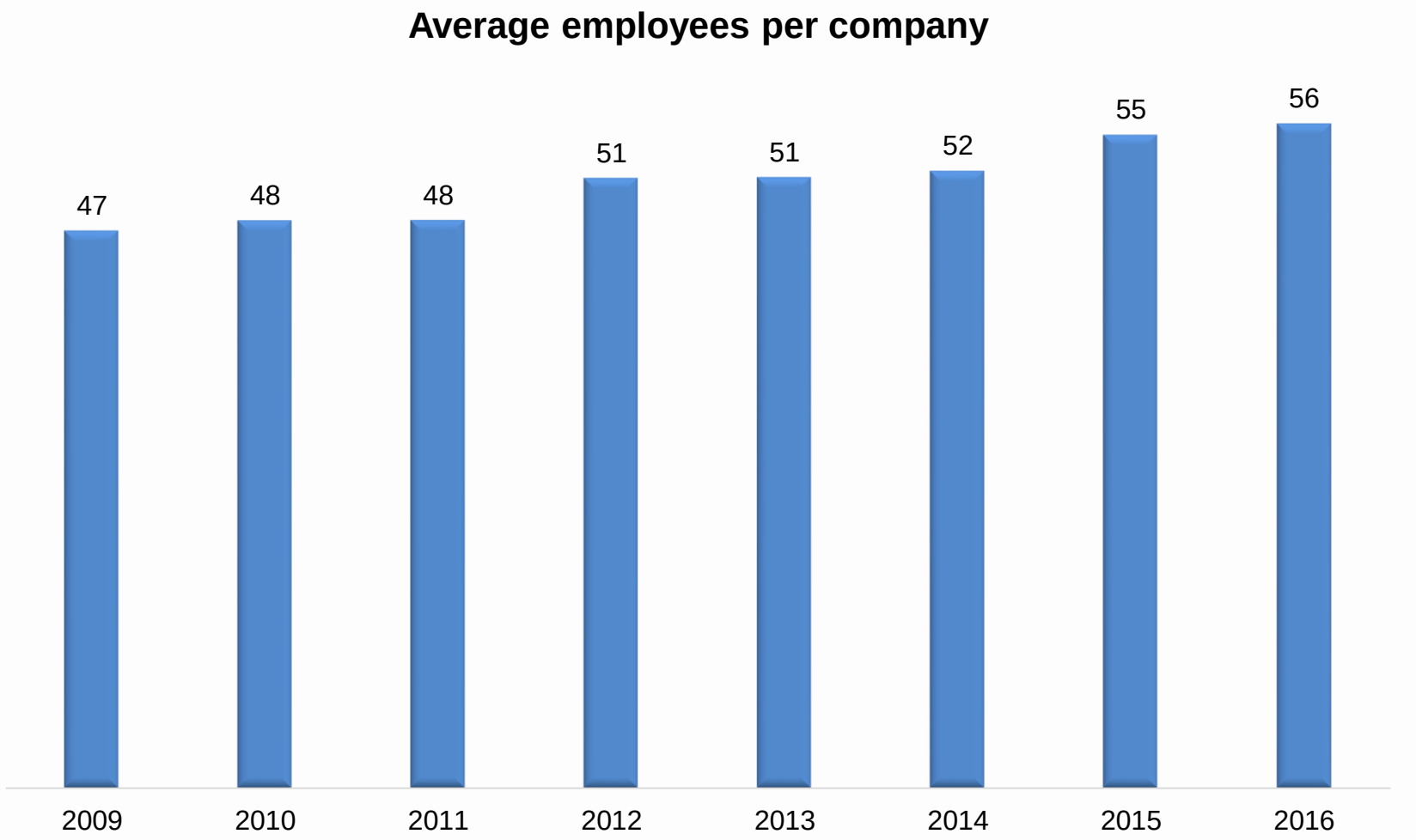
CAGR 2009 - 2016 Revenues: 4.8%.



# Growth


Rate of change in production value
-0,9%
3,82%
5,9%
2,50%
6,6%
8,2%
1,3%
2010
2011
2012
2013
2014
2015
2016

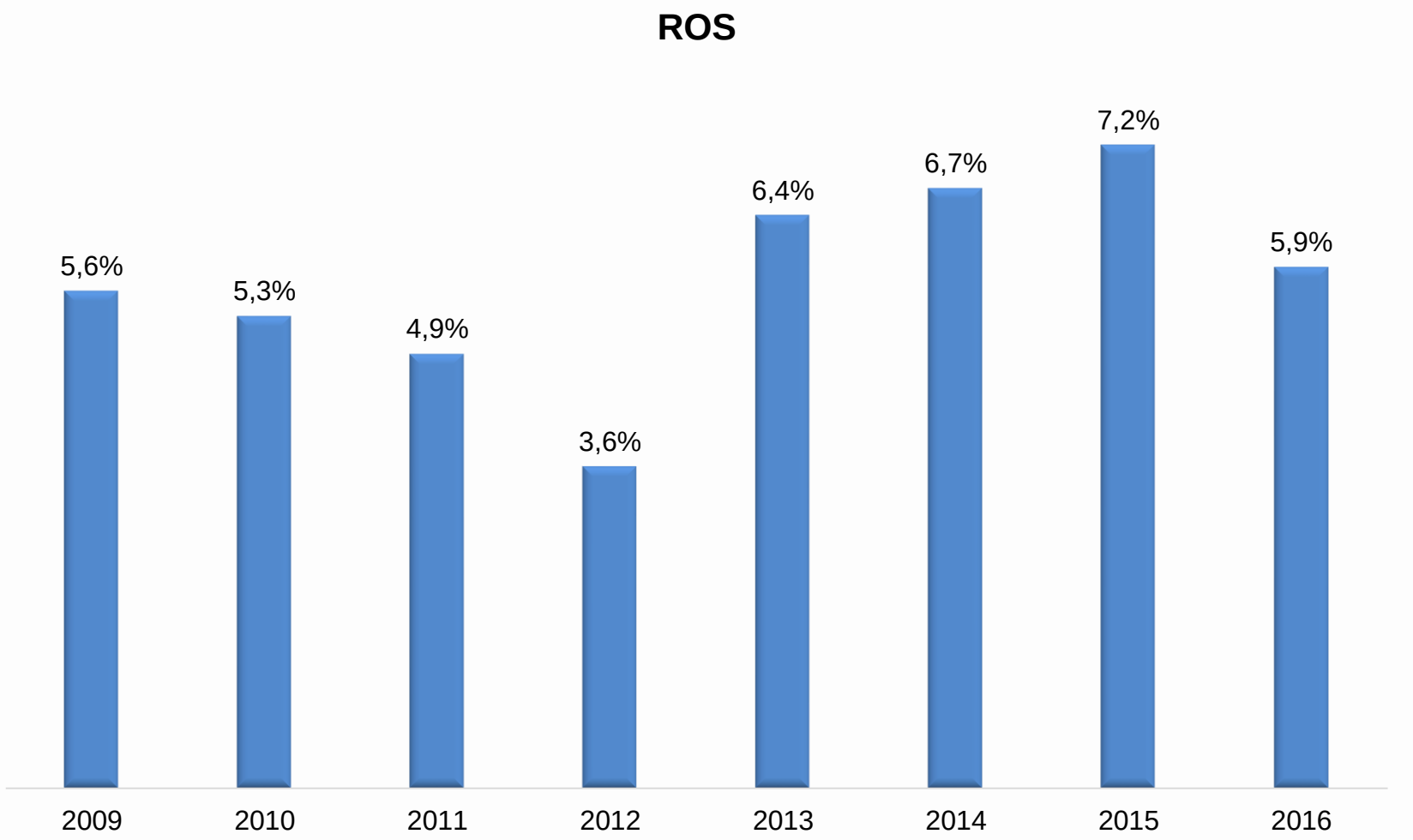
# Growth


Average employees per company
47
48
48
51
51
52
55
56
2009
2010
2011
2012
2013
2014
2015
2016

# Profitability

- The analysis of profitability shows a drop in the marginality of sales (ROS) from 2009 to 2012 with subsequent recovery in 2013, 2014 and 2015. This figure was influenced by the good results achieved by the larger players on international markets and the exit from the Italian market (due to bankruptcy) of some large players that had pushed prices to a level that severely squeezed the commercial marginality. In 2016 there was a decrease in the trading margin which stood at 5.9%, slightly above the industry average.
- The return on investment follows the same trend as ROS and is stable 2014 to in 2016 with a peak in 2015. The CAGR of ROIC is 0.2% and indicates one that companies were able to maintain a good margin even with the investments made in 2012 and 2013.
- ROE (net return on equity) declined in 2014 due to extraordinary charges and the weight of interest expense of debt companies. From 2015 onwards there is a recovery with values above the industry average (6.9%).

# Profitability



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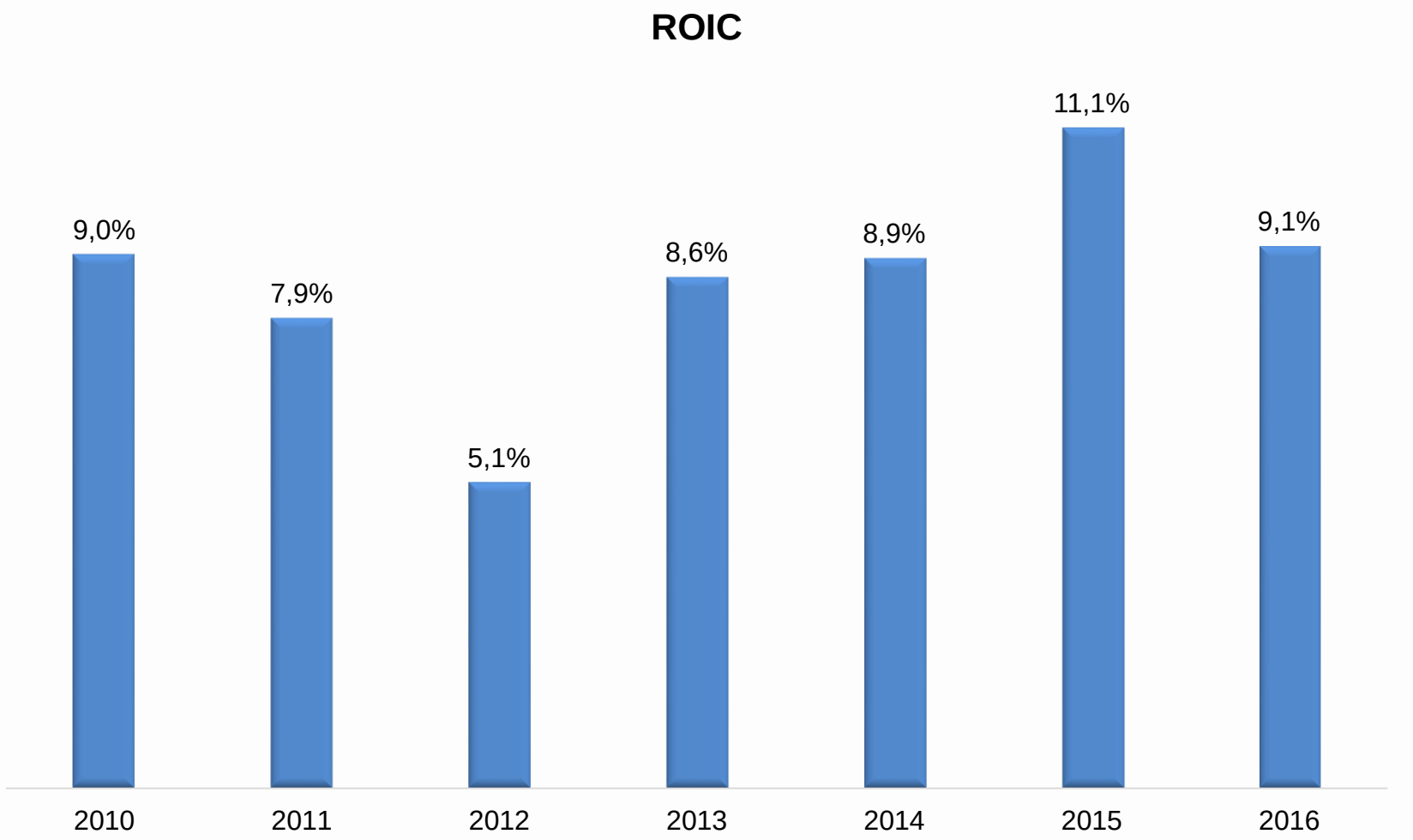

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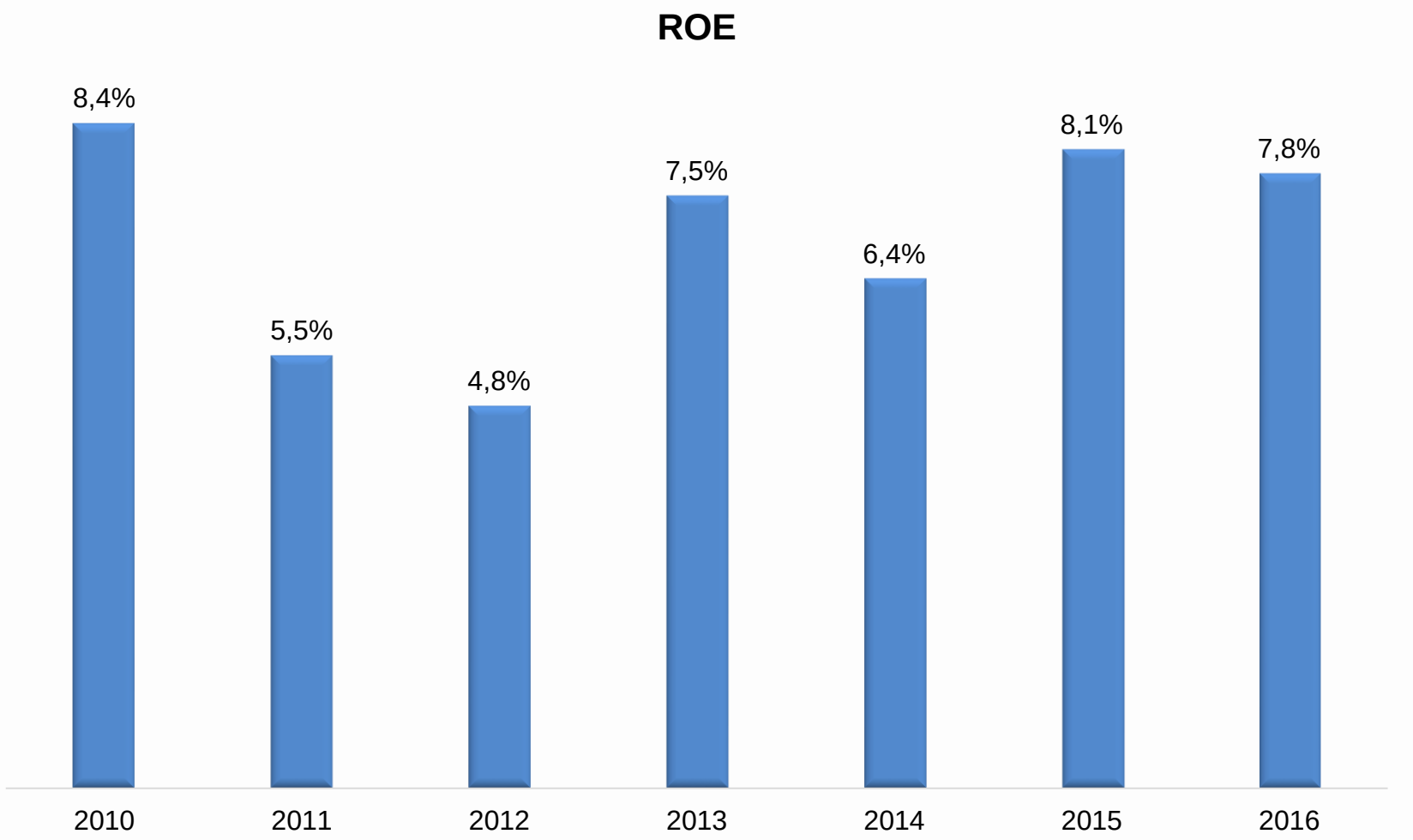
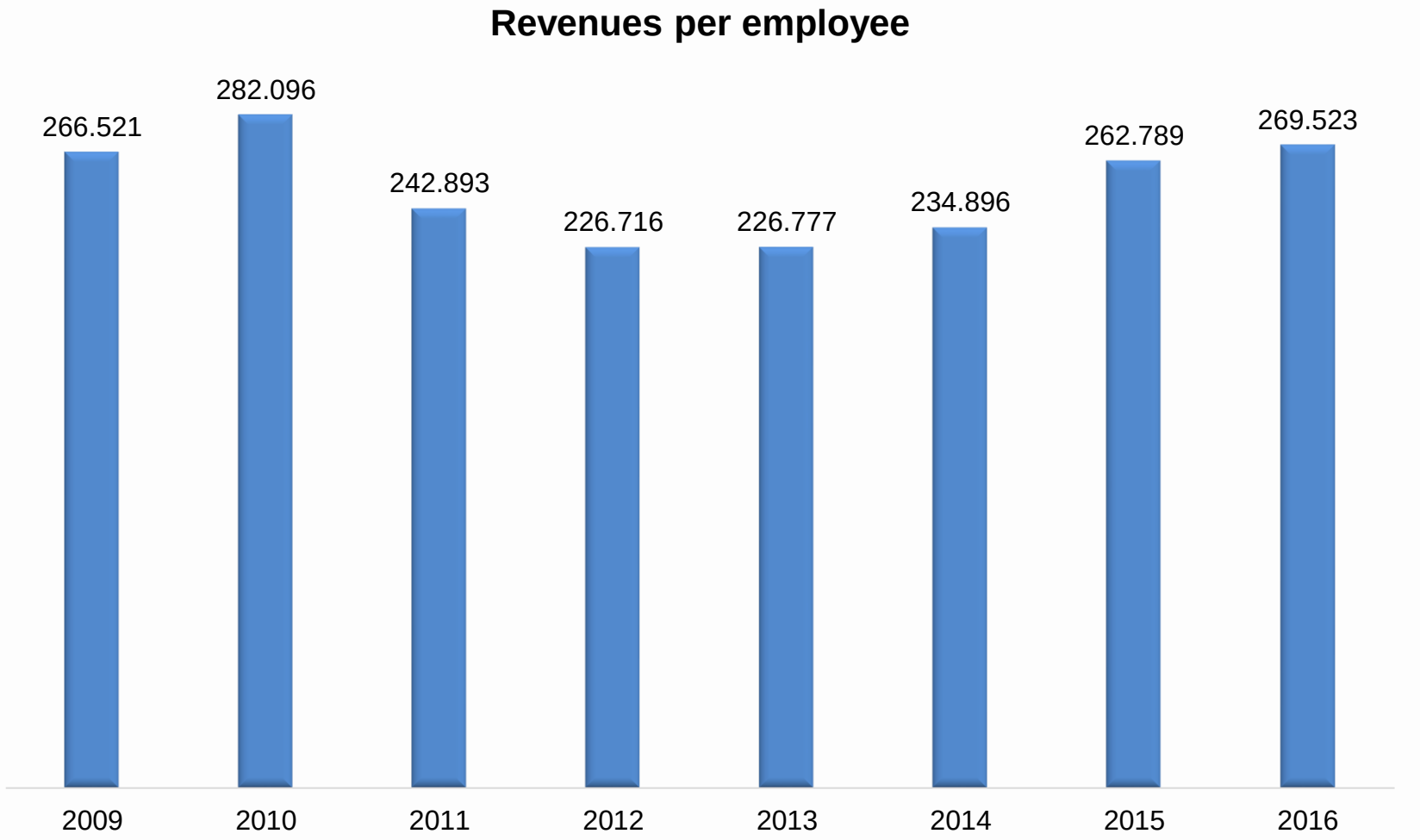


# Productivity

- Business productivity remains constant over the period. Revenues per employee remain substantially constant over the long term with decreases in 2012, 2013 and 2014. The CAGR stands at 0.2% indicating the substantial stability of the values over a period of 7 years.
- The productivity of tangible fixed assets is characterized by a slightly increasing trend over the period considered and recorded the highest value in 2016, standing at 3.9.
- Moderate growth in value added per employee is noted from 2013 onward. In 2016, the value stands at 72,047, which is above the industry average.

# Productivity



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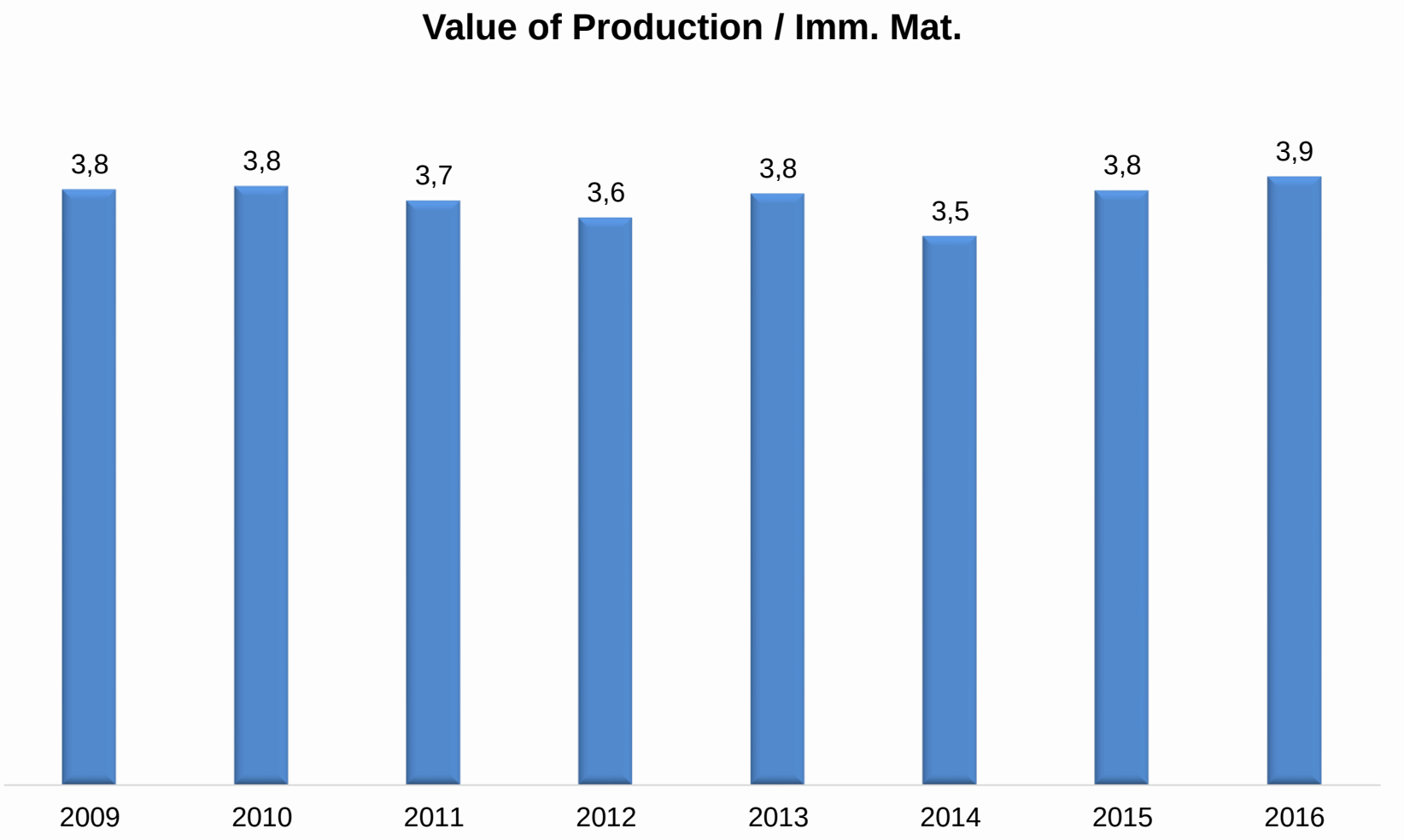

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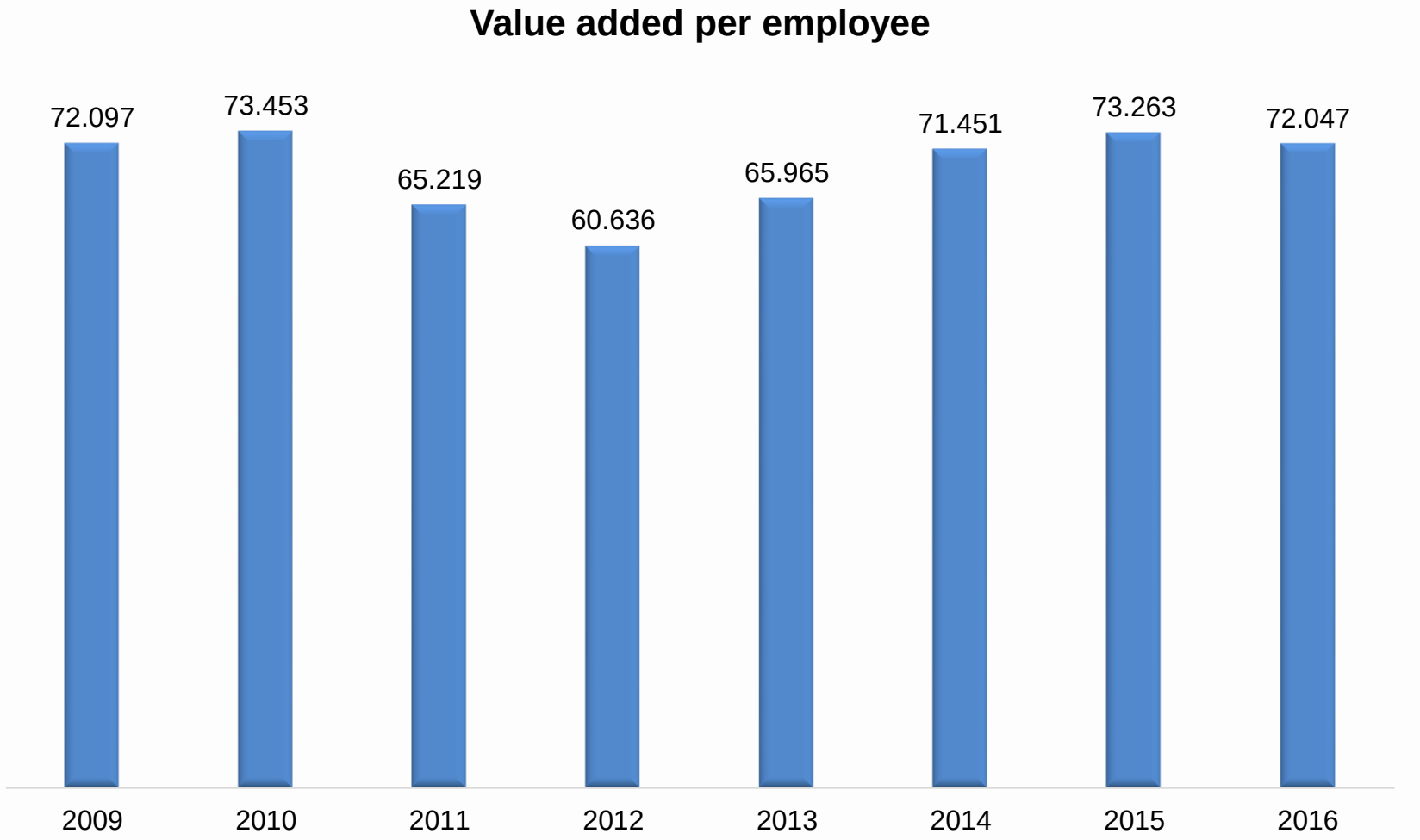


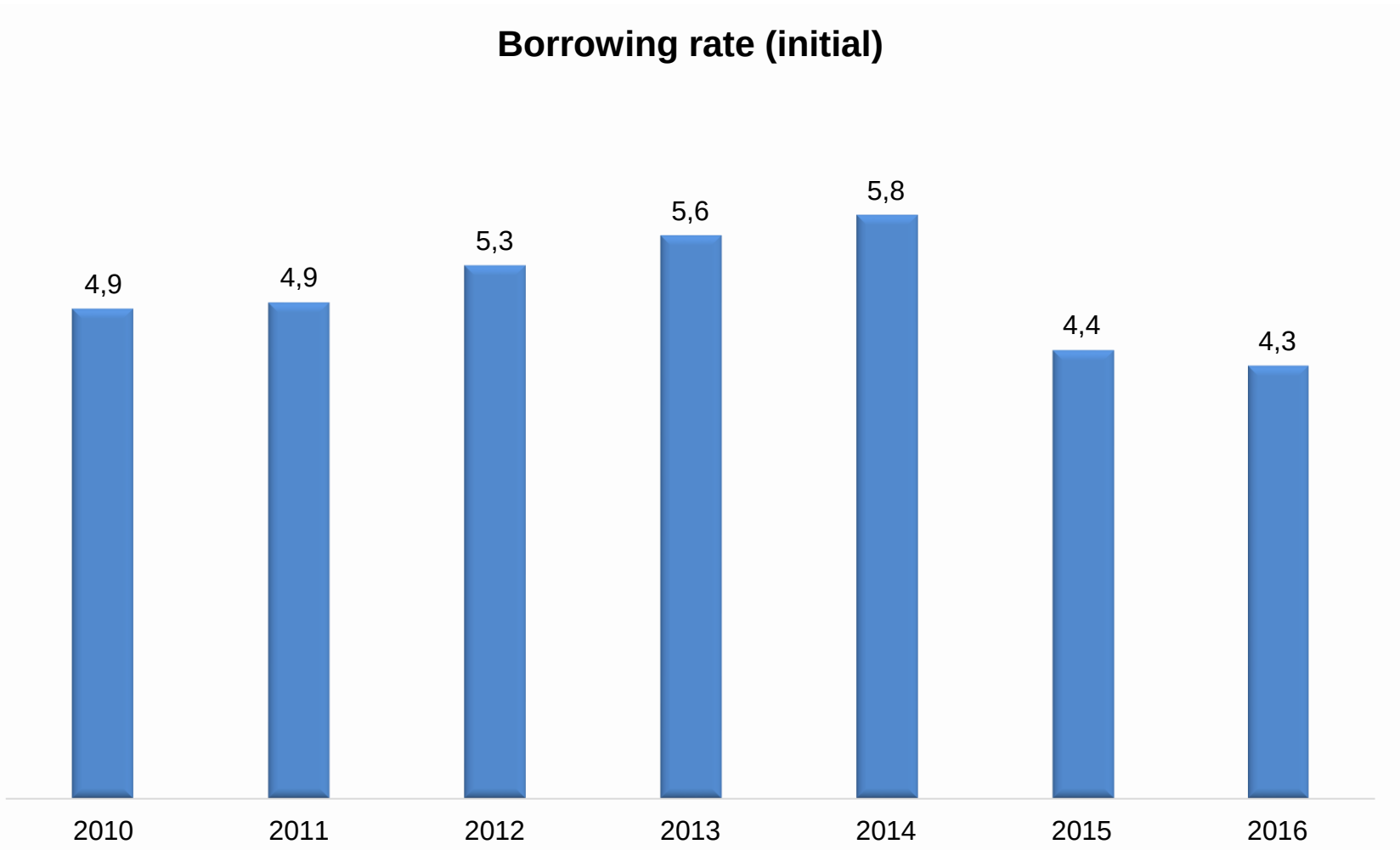
# Financial Structure

- The debt rate was affected by an increasing trend until 2014. From 2015 onwards there is a decrease with values below the industry average. In 2016, a value of 4.3 is recorded, which is the lowest value for the period analyzed.

- The NFP/EBITDA was characterized by an increasing trend until 2013 and then decreased in subsequent years. In 2016, the NFP/EBITDA stood at 1.99 below the industry average (2.6).

- The incidence of financial debts on liabilities takes on low values in the last three years considered and in 2016 stood at 42.4%, the lowest value compared to the period considered.

# Financial Structure



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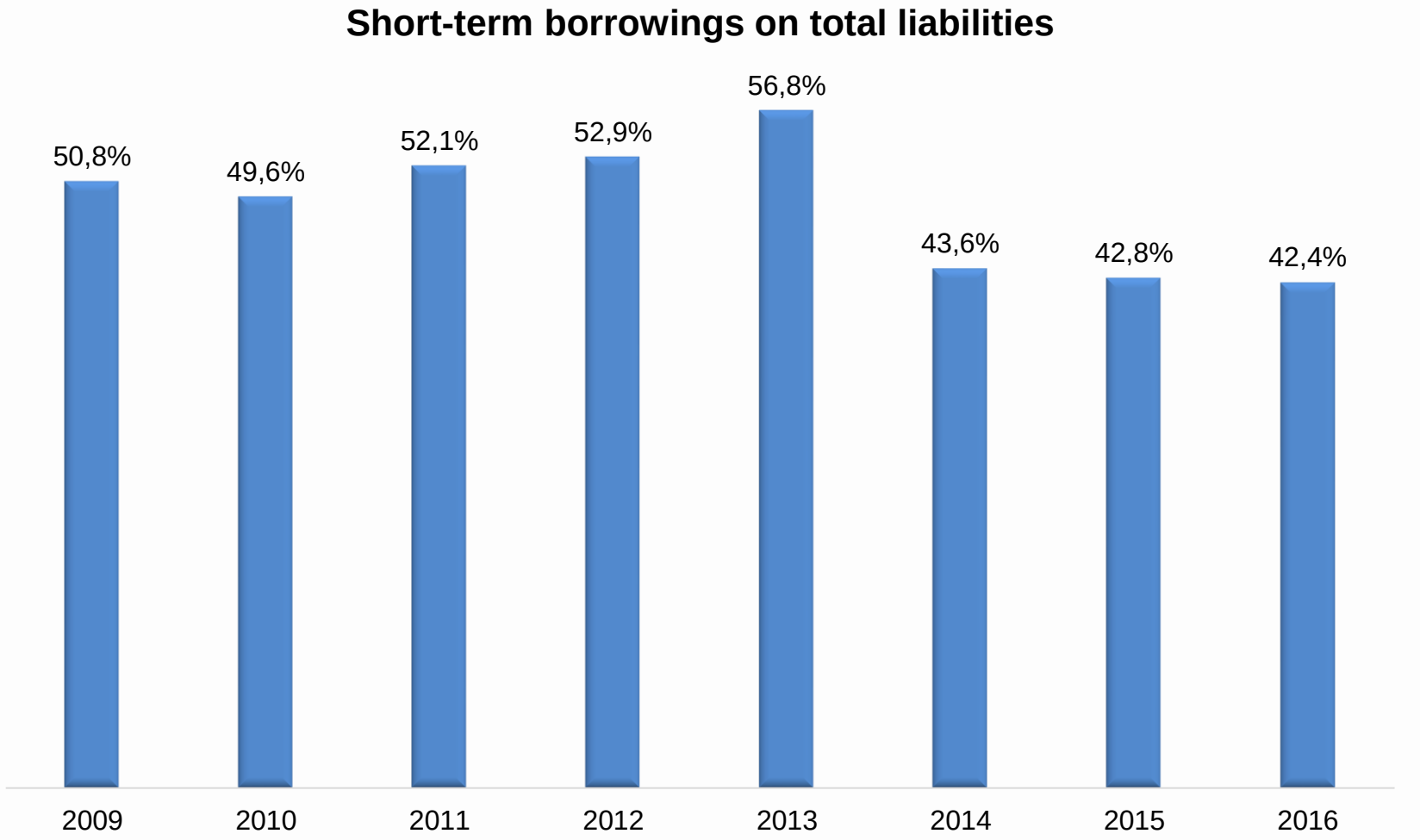


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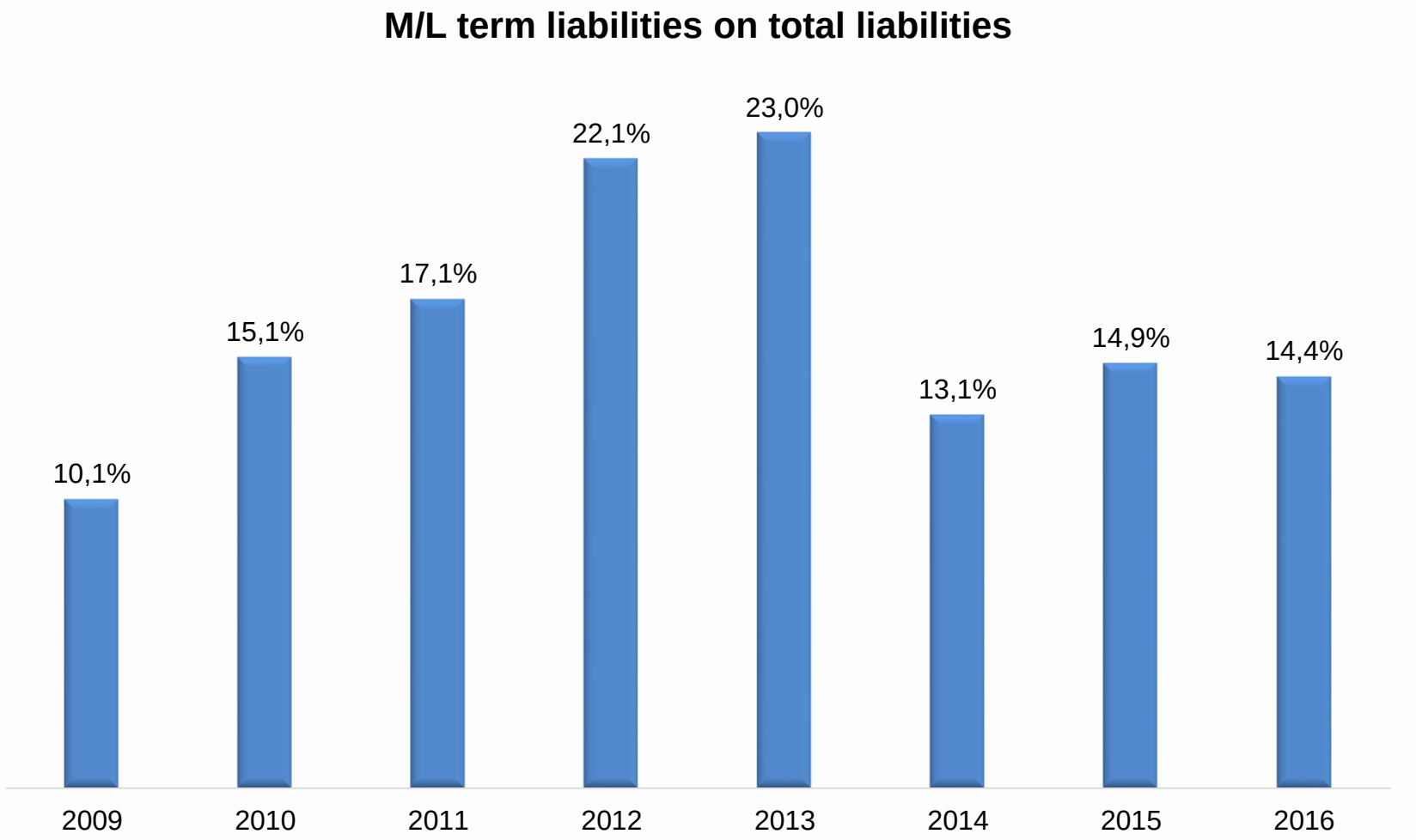

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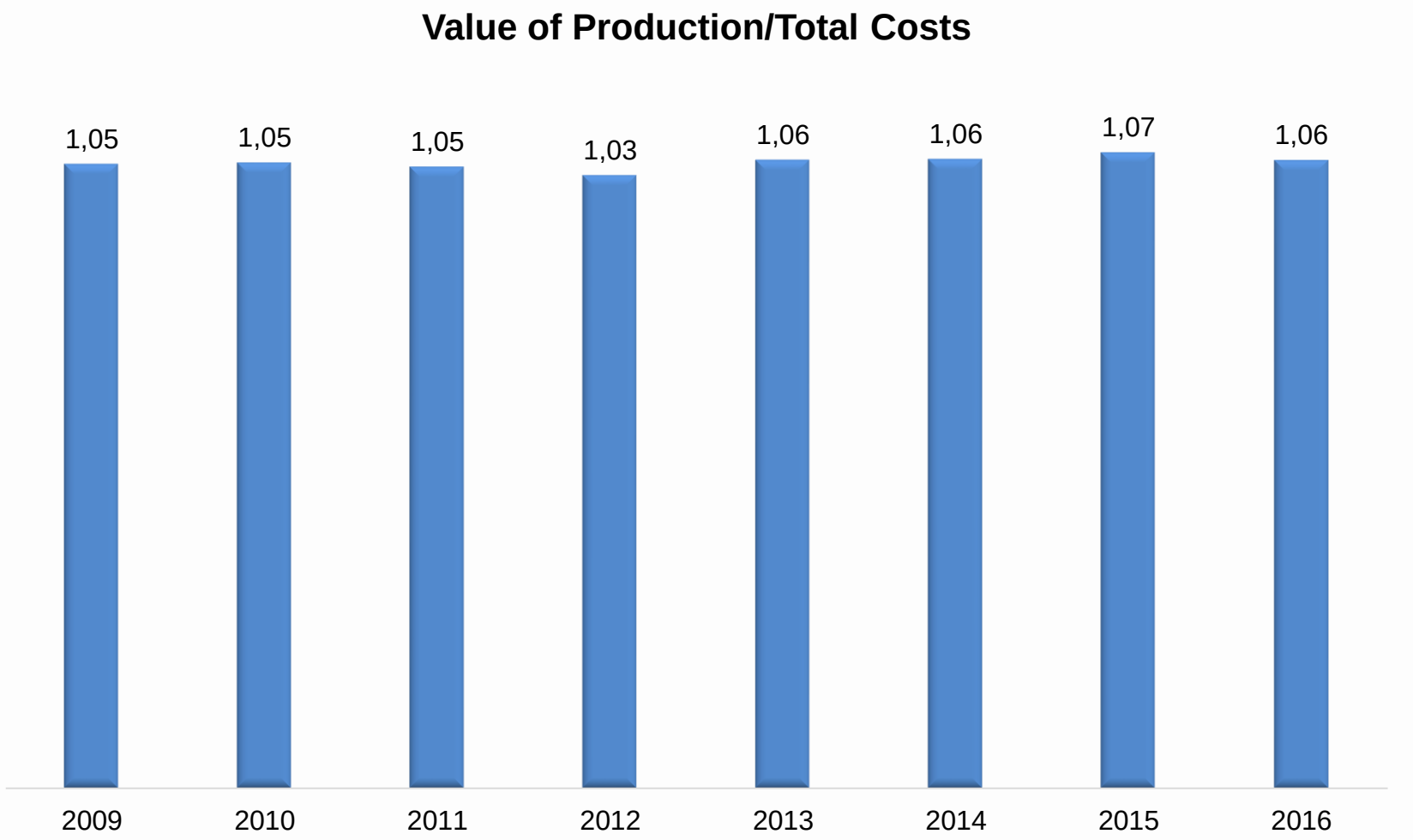


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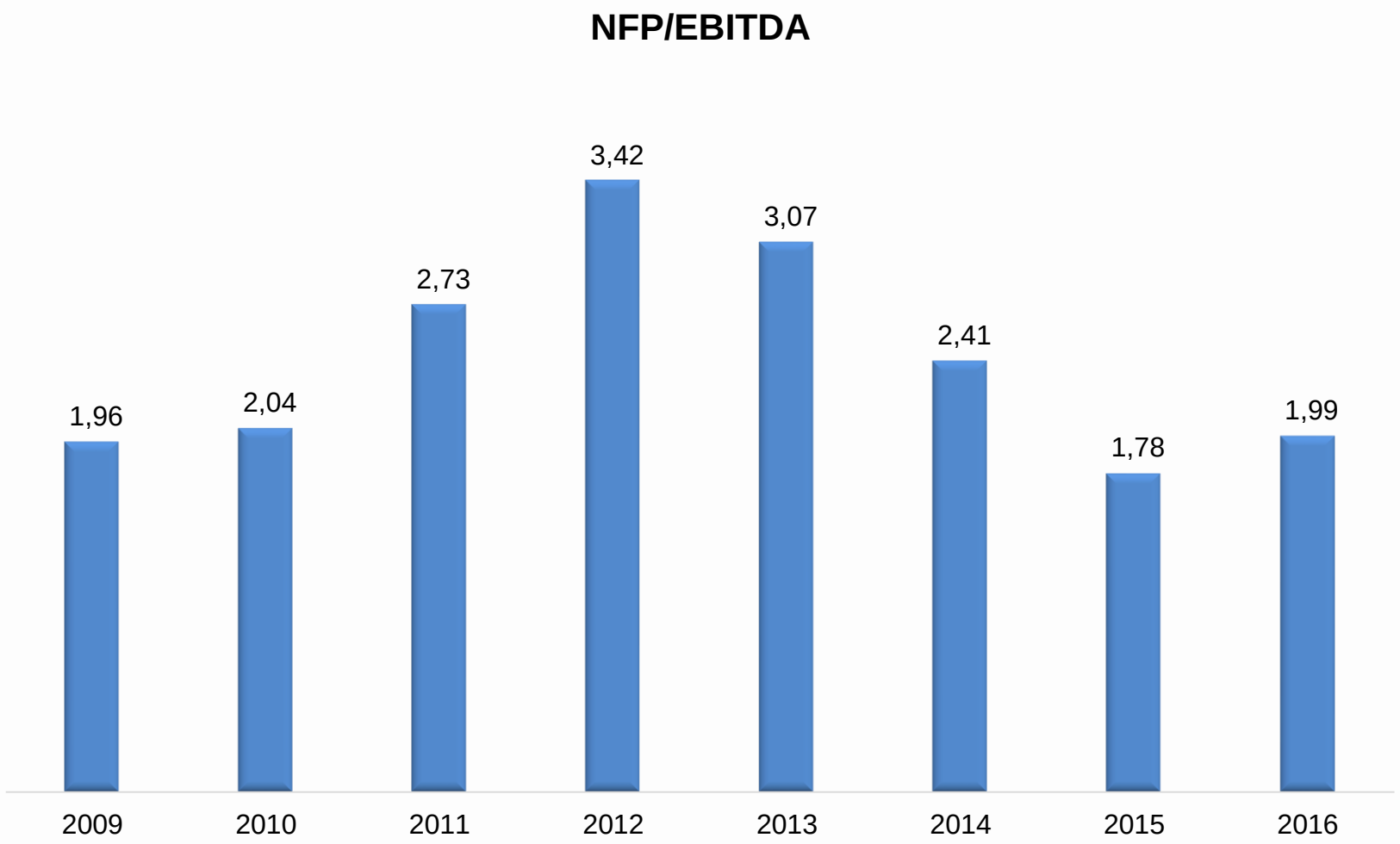
# Financial Structure



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| BALANCE SHEET | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|---|
| ACTIVE | (%) | (%) | (%) | (%) | (%) | (%) | (%) | (%) |
| RECEIVABLES FROM SHAREHOLDERS | **650.945** | **589.007** | **335.000** | **260.000** | **260.000** | **200.000** | **200.000** | **300.000** |
| Inventories | 749.785.810 | 769.416.054 | 845.422.036 | 961.799.423 | 1.136.945.611 | 512.346.208 | 561.601.887 | 573.555.521 |
| Credits | 595.351.754 | 665.844.886 | 759.666.028 | 823.573.894 | 799.930.578 | 837.324.315 | 812.567.661 | 848.464.273 |
| Financial assets | 14.127.548 | 17.755.755 | 17.216.645 | 18.013.511 | 17.571.942 | 18.520.127 | 15.250.784 | 23.834.372 |
| Cash and cash equivalents | 86.988.738 | 96.582.284 | 122.660.840 | 103.768.805 | 105.351.909 | 161.606.711 | 206.029.280 | 210.705.200 |
| **CURRENT ASSETS** | **1.446.253.850** | **1.549.598.979** | **1.744.965.549** | **1.907.155.633** | **2.059.800.040** | **1.529.797.361** | **1.595.449.612** | **1.656.559.366** |
| Intangible fixed assets, of which: | 7.988.697 | 9.082.215 | 10.449.968 | 10.869.450 | 12.737.687 | 15.079.830 | 21.662.574 | 21.287.777 |
| a) Start-up | 1.830.663 | 1.740.718 | 1.614.529 | 4.107.846 | 3.693.041 | 3.722.283 | 3.283.843 | 2.384.875 |
| Tangible fixed assets | 340.805.970 | 335.753.870 | 357.345.304 | 389.442.818 | 382.988.946 | 439.737.238 | 439.480.178 | 435.031.196 |
| Financial fixed assets | 34.722.550 | 34.396.291 | 48.563.528 | 49.742.513 | 76.540.058 | 49.924.543 | 56.300.872 | 75.372.455 |
| **FIXED ASSETS** | **385.347.880** | **380.973.094** | **417.973.329** | **454.162.627** | **475.959.732** | **508.463.894** | **520.727.467** | **534.076.303** |
| ACCRUALS AND DEFERRALS | 17.615.028 | 14.089.304 | 15.348.386 | 15.052.274 | 13.383.386 | 13.254.247 | 12.512.485 | 12.060.125 |
| **TOTAL ASSETS** | **1.849.867.703** | **1.945.250.384** | **2.178.622.264** | **2.376.630.534** | **2.549.403.158** | **2.051.715.502** | **2.128.889.564** | **2.202.995.794** |
| LIABILITY | | | | | | | | |
| Total payables, of which: | **1.393.776.664** | **1.474.661.483** | **1.674.461.086** | **1.862.198.183** | **2.017.055.734** | **1.476.768.528** | **1.508.132.927** | **1.594.927.191** |
| a) financial | 940.264.103 | 964.054.071 | 1.136.038.412 | 1.256.756.612 | 1.447.115.129 | 893.657.646 | 910.417.019 | 933.689.549 |
| b) from suppliers | 335.441.949 | 374.900.347 | 389.735.054 | 438.878.487 | 419.995.406 | 436.007.564 | 420.969.766 | 447.027.668 |
| Provisions for risks | 27.250.227 | 25.338.246 | 40.753.530 | 36.362.409 | 37.038.376 | 56.589.124 | 64.900.888 | 47.627.743 |
| Severance pay | 38.747.017 | 40.685.916 | 42.835.143 | 43.891.720 | 45.540.500 | 47.160.841 | 47.981.873 | 46.371.736 |
| **EQUITY** | **381.051.777** | **395.633.735** | **412.300.354** | **425.932.854** | **440.978.554** | **461.567.234** | **496.032.025** | **504.780.269** |
| Accruals and Deferrals | 9.042.018 | 8.931.004 | 8.270.351 | 8.245.367 | 8.789.994 | 9.629.775 | 11.841.851 | 9.288.855 |
| **TOTAL LIABILITIES** | **1.849.867.703** | **1.945.250.384** | **2.178.620.464** | **2.376.630.533** | **2.549.403.158** | **2.051.715.502** | **2.128.889.564** | **2.202.995.794** |

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| PROFIT AND LOSS ACCOUNT | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|---|
| **VALUE OF PRODUCTION** | **1.288.051.255** | **1.276.088.671** | **1.324.897.642** | **1.402.600.876** | **1.437.624.477** | **1.532.294.157** | **1.658.131.167** | **1.679.496.218** |
| Revenues from sales and services | 1.137.246.246 | 1.238.964.869 | 1.218.106.890 | 1.232.882.976 | 1.234.801.347 | 1.291.928.350 | 1.529.694.314 | 1.581.019.733 |
| Total Variations | 127.831.489 | 15.454.043 | 66.198.841 | 111.677.879 | 165.024.922 | 201.653.407 | 88.424.022 | 37.648.901 |
| **PRODUCTION COSTS** | **1.185.264.604** | **1.172.026.542** | **1.223.007.487** | **1.309.524.079** | **1.316.587.606** | **1.395.801.943** | **1.494.661.243** | **1.537.504.676** |
| Raw materials and consumption | 502.071.920 | 526.338.338 | 601.843.356 | 593.866.255 | 548.550.343 | 601.200.297 | 650.480.582 | 654.439.663 |
| Services | 394.549.757 | 367.717.665 | 351.413.178 | 412.817.019 | 459.965.537 | 489.619.150 | 497.656.406 | 524.695.365 |
| Use of third party assets | 41.952.797 | 47.587.032 | 46.236.023 | 43.974.861 | 38.729.139 | 43.765.419 | 52.093.838 | 53.552.658 |
| Personnel costs | 204.852.731 | 218.543.724 | 225.183.067 | 236.661.506 | 238.140.713 | 256.488.435 | 262.992.972 | 280.634.853 |
| Variation of materials | 23.720.433 | -892.313 | -15.739.014 | 2.995.515 | 17.362.920 | -12.924.090 | 12.023.771 | -1.556.538 |
| Other operating expenses | 18.116.966 | 12.732.096 | 14.070.877 | 19.208.923 | 13.838.954 | 17.652.732 | 19.413.674 | 25.738.675 |
| **ADDED VALUE** | **307.639.382** | **322.605.853** | **327.073.222** | **329.738.303** | **359.177.584** | **392.980.649** | **426.462.896** | **422.626.395** |
| **GROSS OPERATING MARGIN** | **102.786.651** | **104.062.129** | **101.890.155** | **93.076.797** | **121.036.871** | **136.492.214** | **163.469.924** | **141.991.542** |
| Total amortization, depreciation and write-downs, of which: | 36.123.539 | 36.606.219 | 40.083.846 | 39.068.495 | 40.271.952 | 46.901.964 | 51.322.721 | 46.670.615 |
| a) depreciation | 32.453.430 | 33.373.773 | 32.736.786 | 34.261.265 | 34.850.906 | 39.075.526 | 38.744.196 | 40.305.861 |
| Provisions for risks and other provisions | 3.144.060 | 1.774.828 | 2.391.943 | 9.436.413 | 1.311.160 | 2.545.533 | 1.641.311 | 2.768.486 |
| **OPERATING RESULT** | **63.519.052** | **65.681.082** | **59.414.366** | **44.571.889** | **79.453.759** | **87.044.717** | **110.505.892** | **92.552.441** |
| Financial income and expenses | -10.230.166 | -7.028.444 | -11.461.413 | -1.269.649 | -15.648.072 | -27.064.412 | -47.980.904 | -26.589.847 |
| Adjustments to financial assets | -1.164.658 | -1.078.549 | -1.884.207 | -1.526.771 | -2.332.364 | -3.664.440 | -1.737.195 | 667.919 |
| Extraordinary income/expenses | -1.117.649 | 72.379 | 476.474 | -455.102 | -137.886 | 2.576.257 | 3.480.485 | 0 |
| **PRE-TAX RESULT** | **51.006.579** | **57.646.468** | **46.545.220** | **41.320.367** | **61.335.437** | **58.892.122** | **64.268.278** | **66.630.513** |
| Current, deferred and prepaid taxes | -25.146.250 | -25.634.580 | -24.910.976 | -20.871.933 | -20.468.803 | -20.443.993 | -27.015.753 | -28.100.265 |

# Focus on larger companies

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# The characteristics of the companies

- The analysis of the larger companies was carried out considering 32 carpentries (top players) with a turnover of over 10 million Euros. As can be seen from the data, these are medium and large sized companies that are less dependent on the dynamics of the national market and, as we will see, have a better average performance than the entire sample.

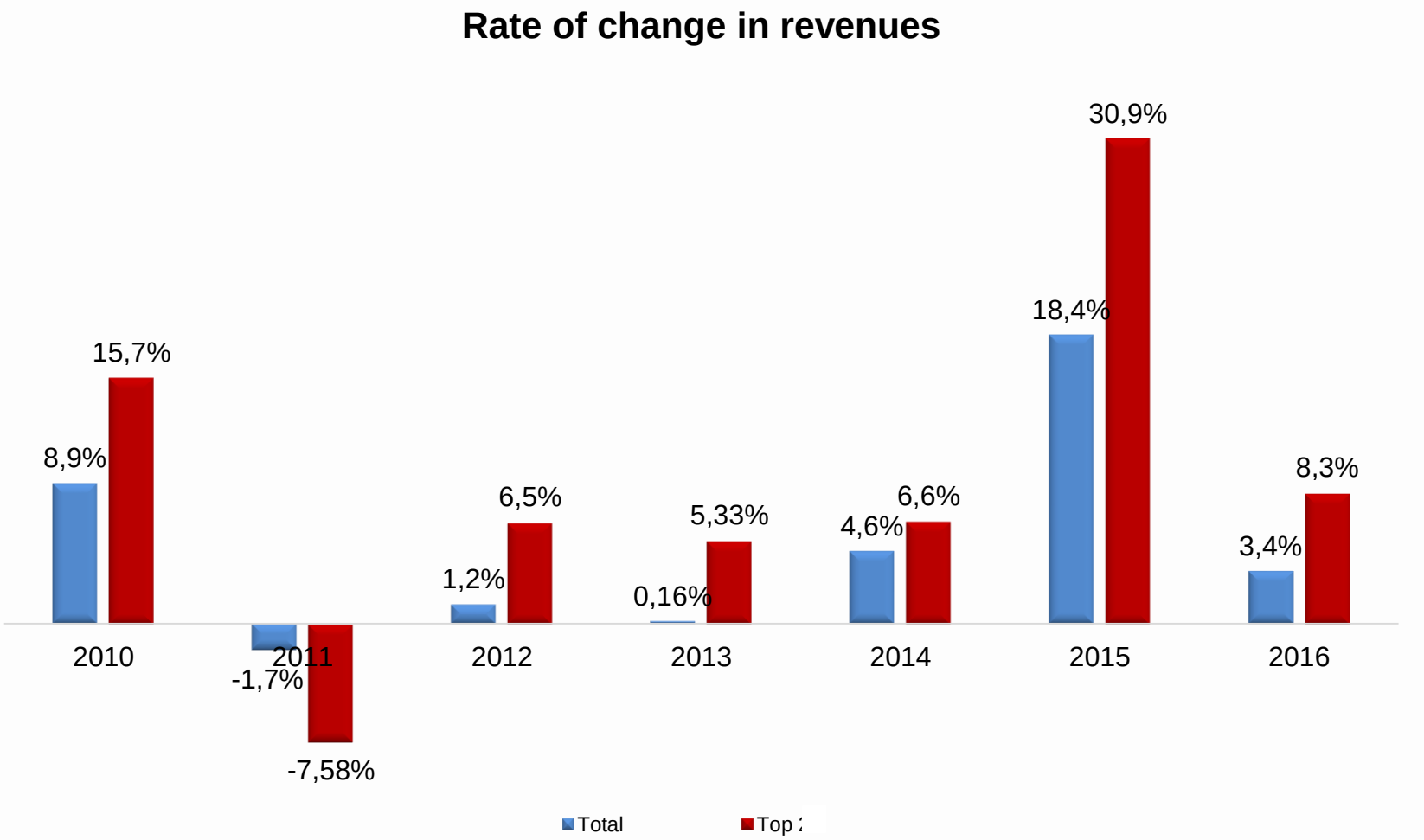
## Companies with a turnover exceeding 10 million Euros

| | |
|---|---|
| Number of companies | 32 |
| Average turnover | 39.954.273 € |
| Average number of employees | 128 |
| Aggregate turnover | 1.278.536.739 € |

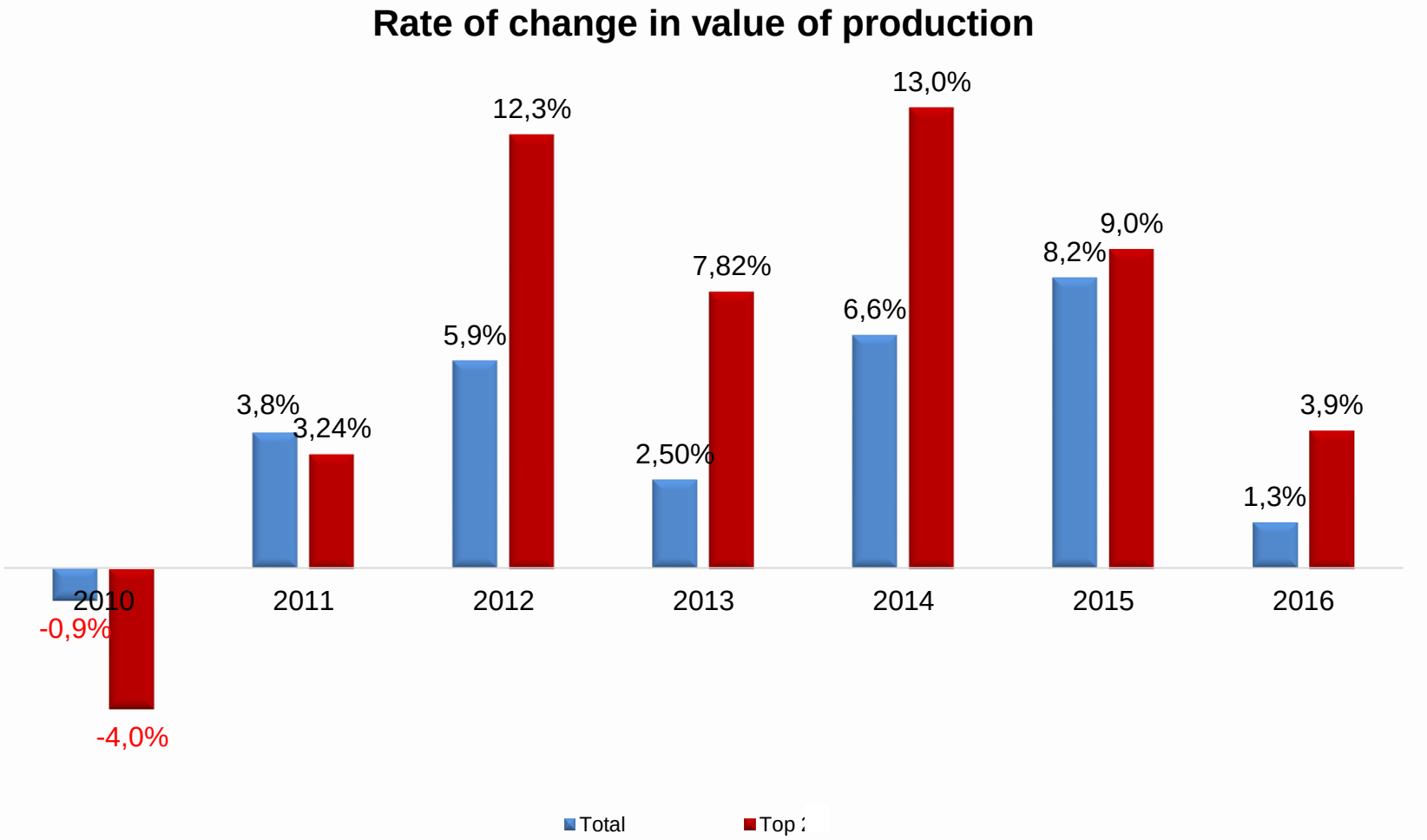
# Growth

- The growth performance of the larger companies is more satisfactory than that of the entire sample. Both revenues and value of production grew at significantly higher rates throughout the period considered.
- Both dimensions considered have grown in number of employees. The total change is characterized by an increasing trend throughout the period considered. In 2016, however, there is a decrease in the number of employees for large companies.

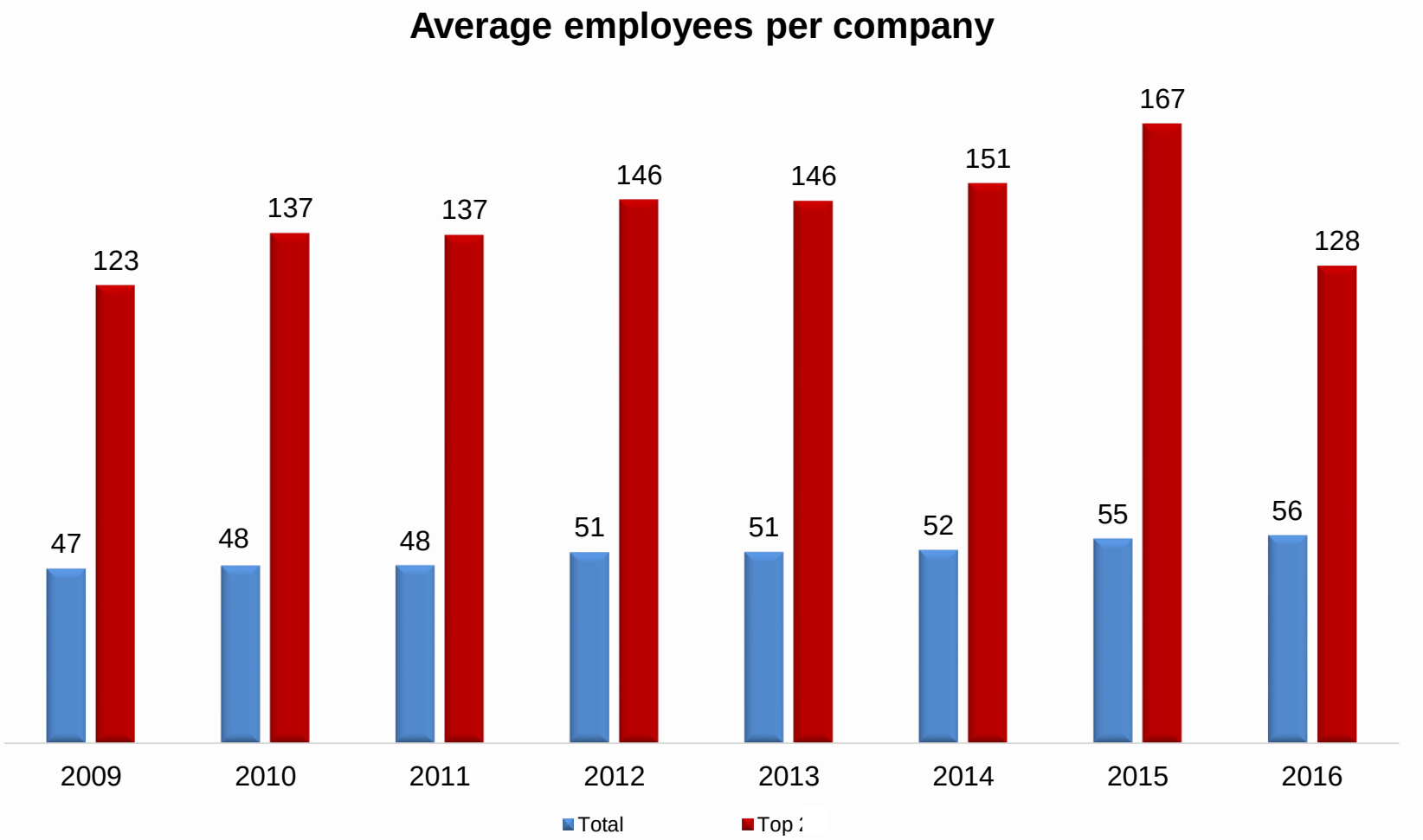
# Growth


Rate of change in revenues
30,9%
18,4%
15,7%
8,9%
8,3%
6,5%
6,6%
5,33%
4,6%
3,4%
1,2%
0,16%
-1,7%
-7,58%
2010
2011
2012
2013
2014
2015
2016
Total
Top 2

# Growth


Rate of change in value of production
2010
2011
2012
2013
2014
2015
2016
-0,9%
-4,0%
3,8%
3,24%
5,9%
12,3%
2,50%
7,82%
6,6%
13,0%
8,2%
9,0%
1,3%
3,9%
Total
Top 2

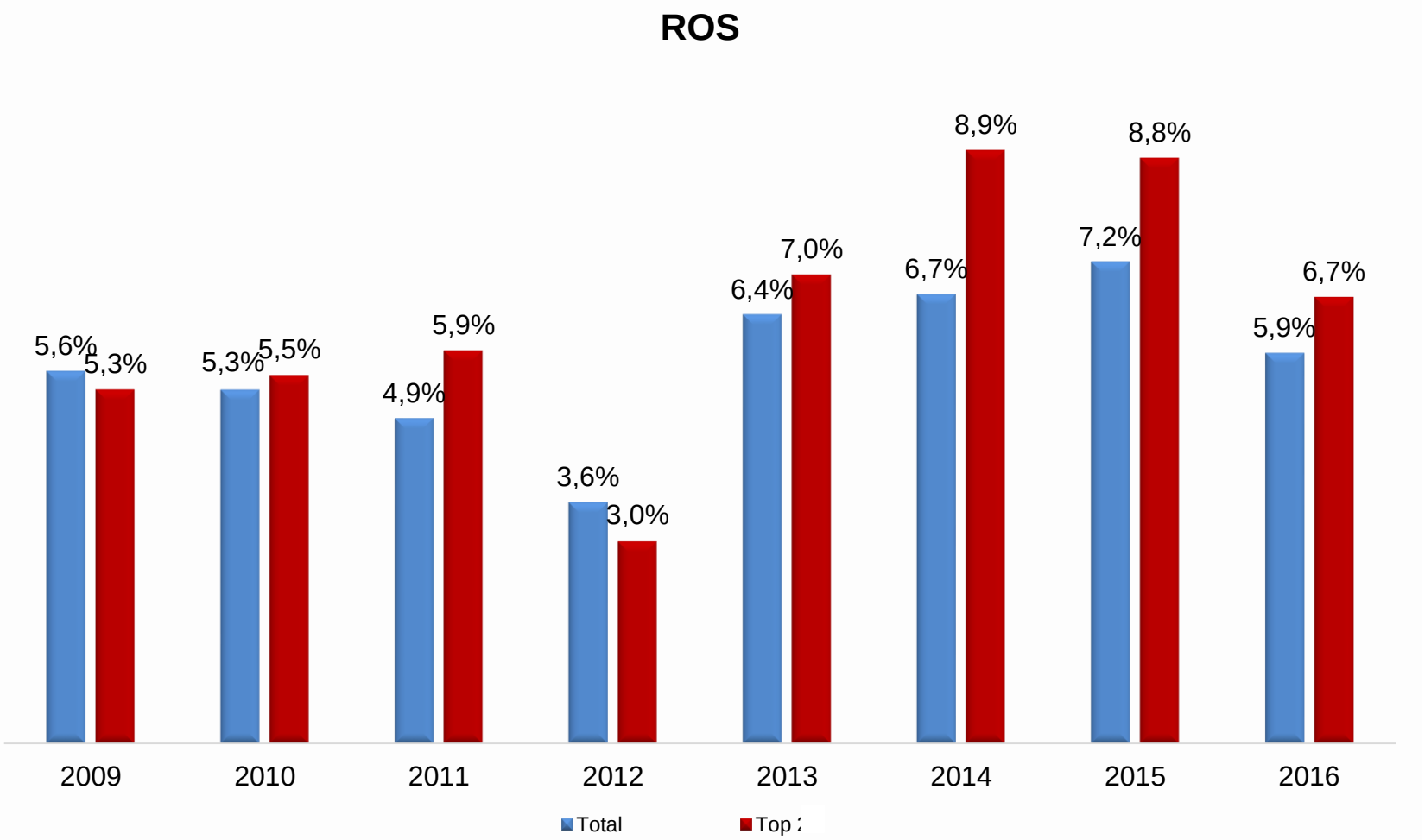
# Growth


Average employees per company
47
123
48
137
48
137
51
146
51
146
52
151
55
167
56
128
2009
2010
2011
2012
2013
2014
2015
2016
Total
Top 2

# Profitability

- The profitability on sales (ROS) of the largest companies is structurally higher than that of the entire sample. Since 2013, there has been an increase in the gap between the total sample and top companies caused by a decrease in production costs linked to better raw material purchase prices.
- The return on invested capital (ROIC) is stable until 2013 for the top companies in the industry. From 2014 onwards there is an increase in the return on invested capital. The improvement in profitability is noted for both sizes although the gap between large companies and the rest of the sample increases in the last three years considered.

# Profitability



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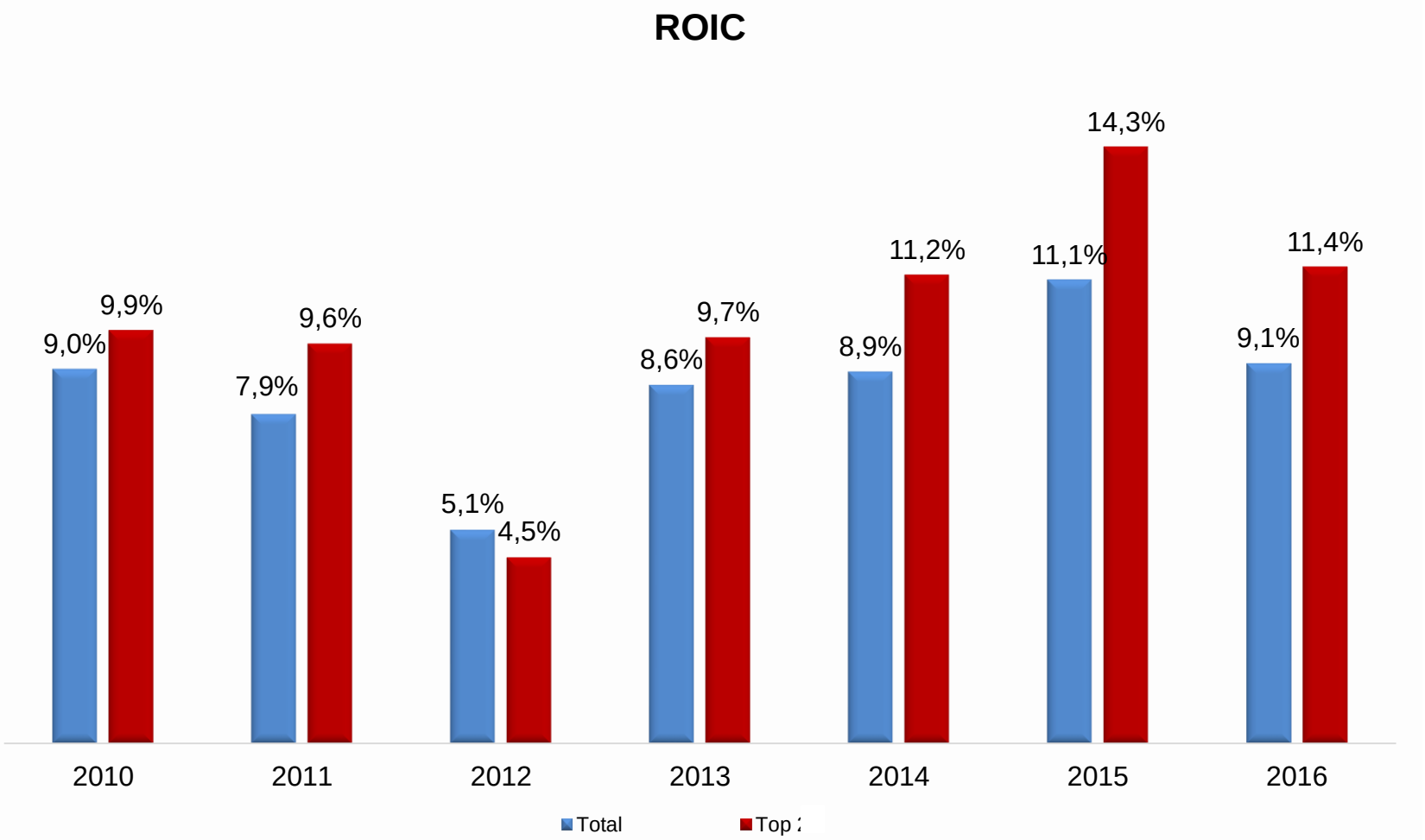

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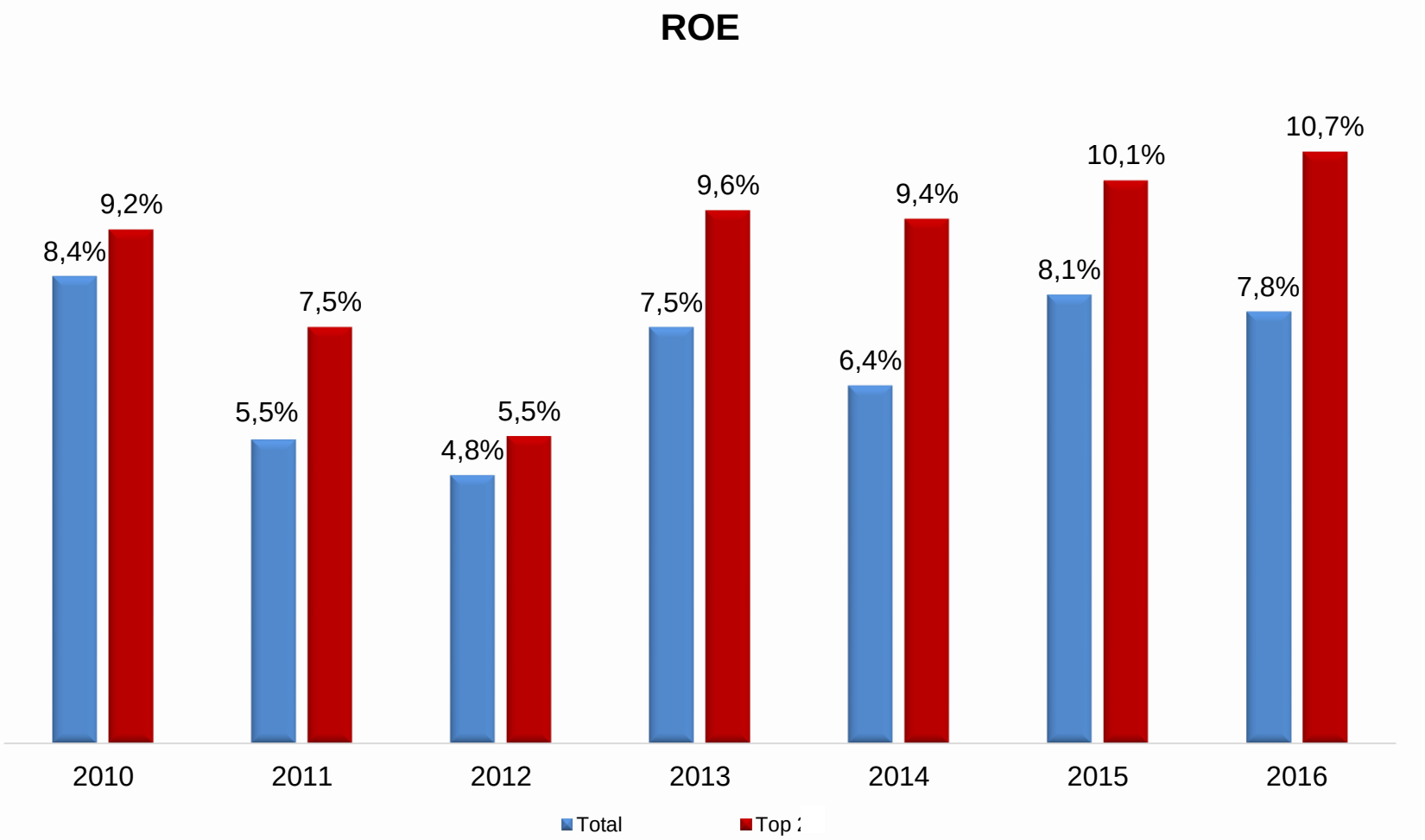
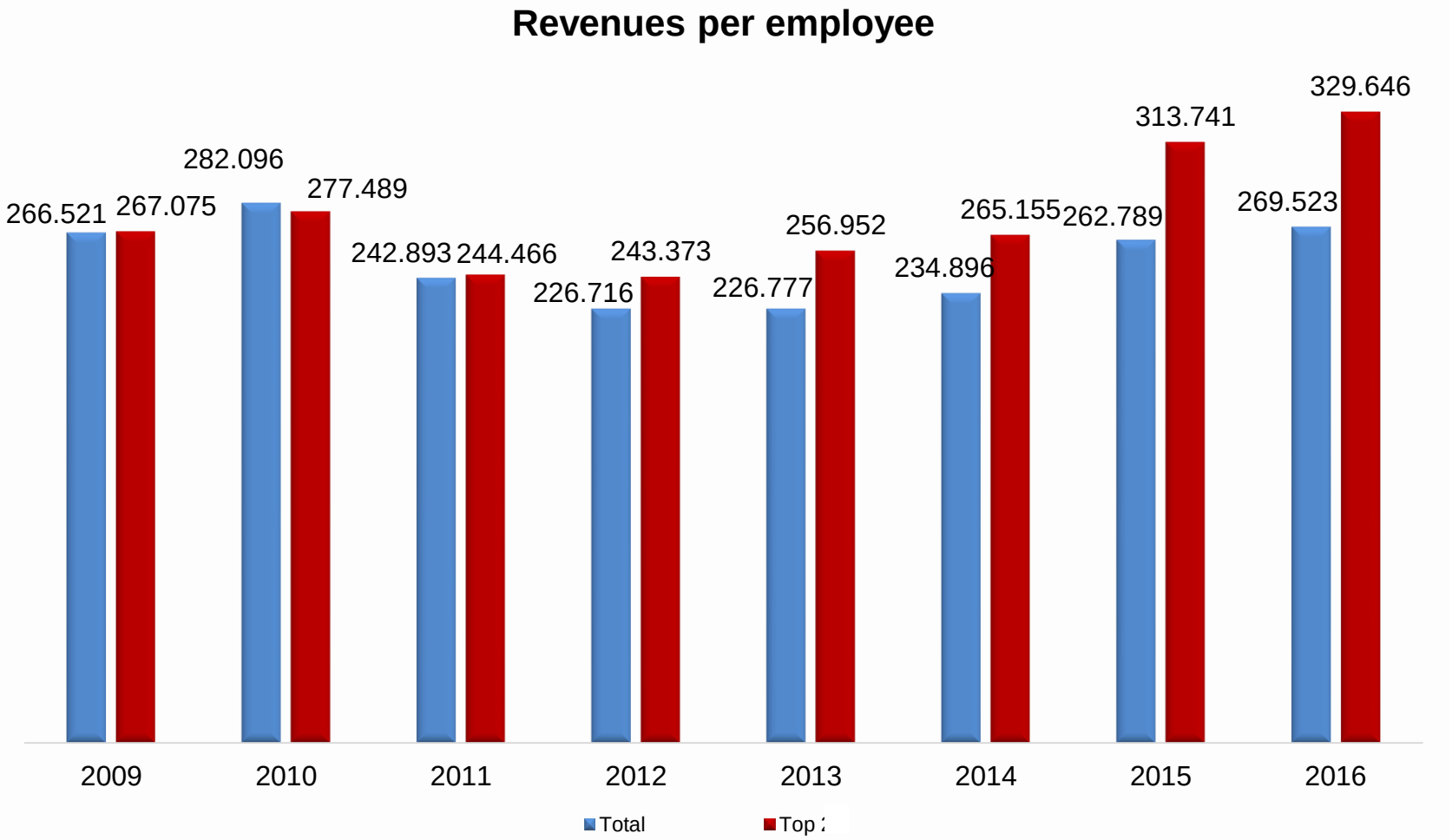


# Productivity

- The productivity of larger firms is higher than that of the sample.
- Revenues per employee of top companies were affected by an increasing trend from 2012 to 2016. In the last year, the highest value of the period is recorded, which stands at 329 thousand euros revenue per employee.
- The productivity of tangible assets has an overall positive trend, with a peak in 2013 and a slight decline in 2014. From 2015 onwards there is a further recovery, which in the last year stands at 4.2 for large companies.

# Productivity



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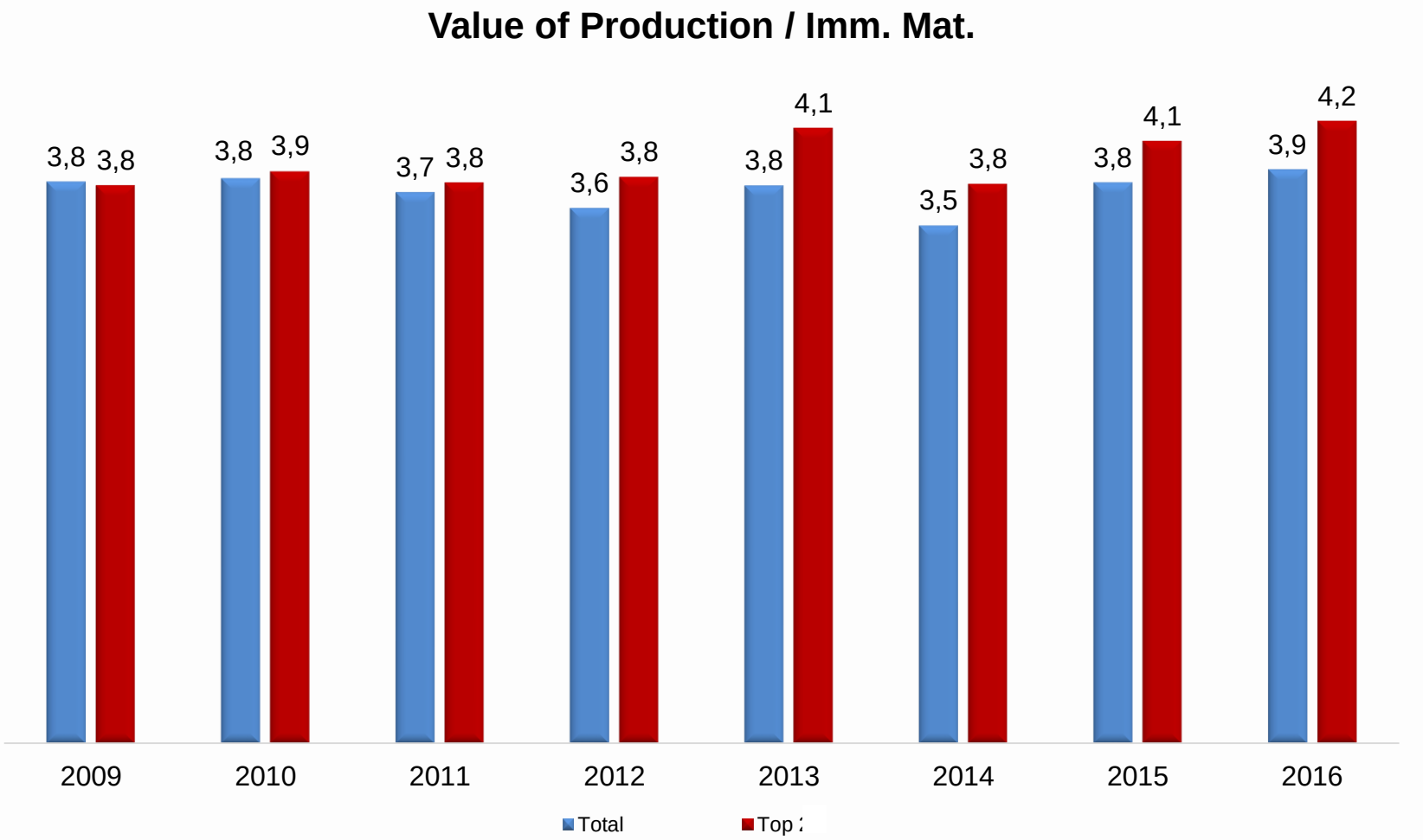
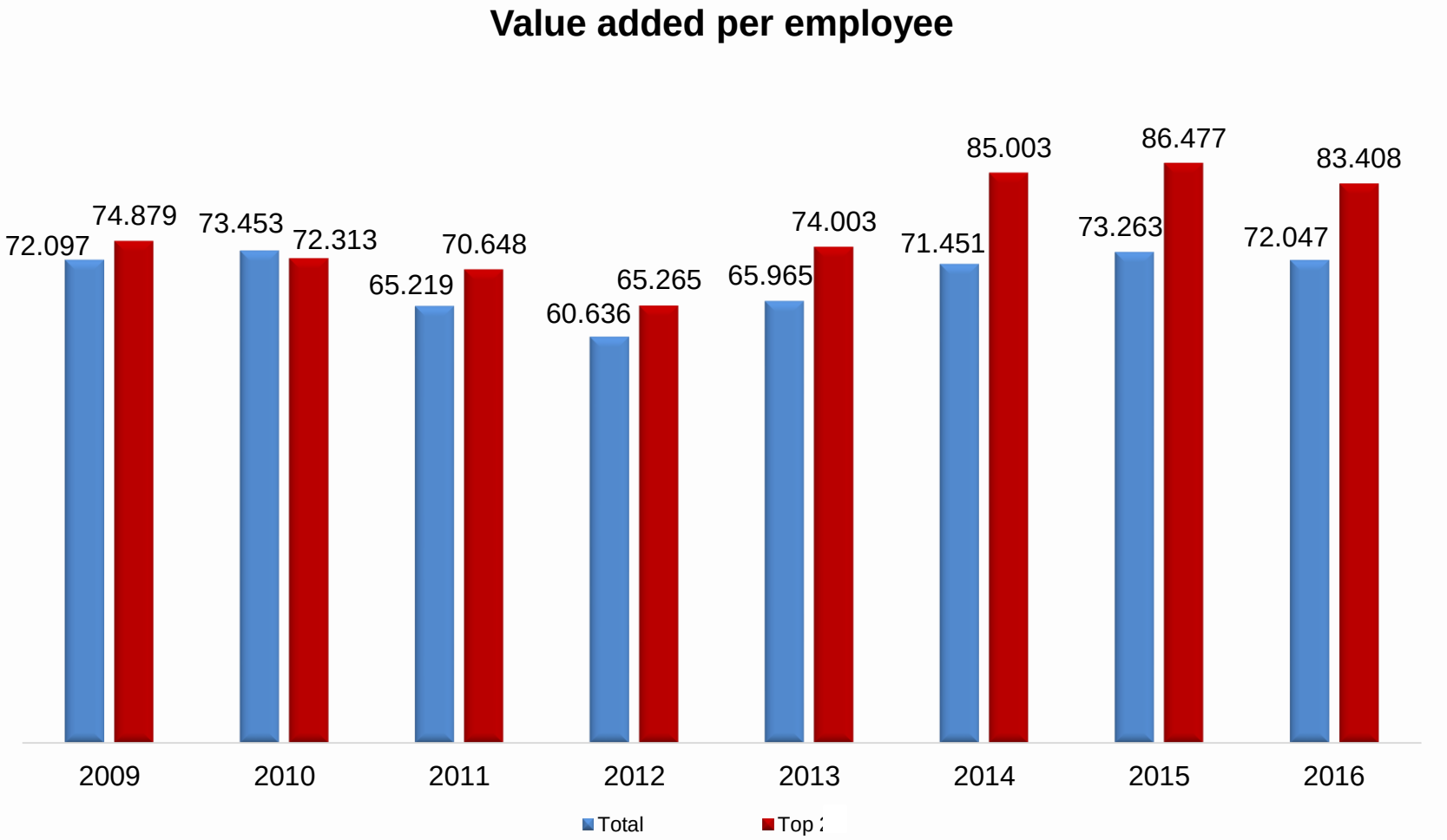


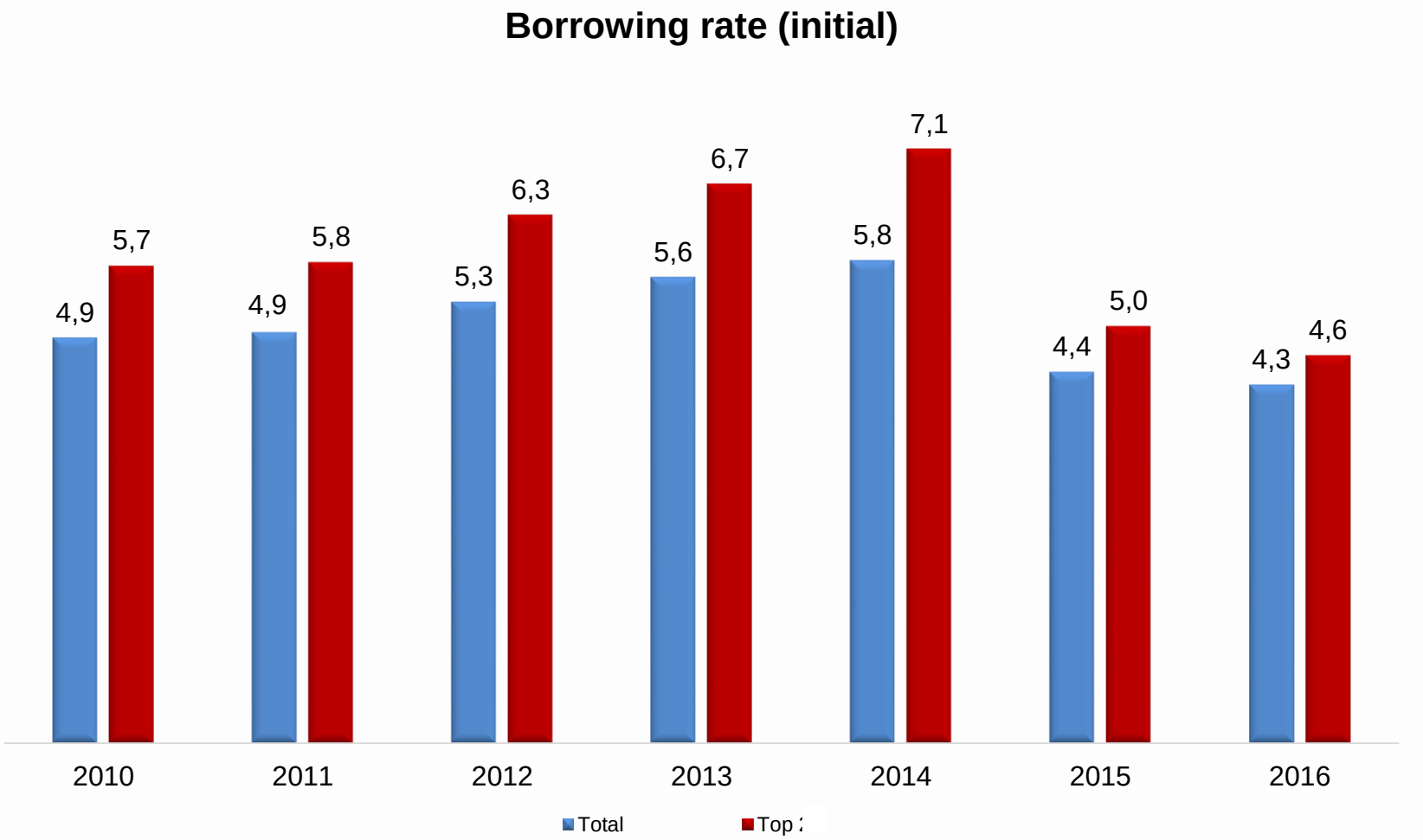
# Productivity



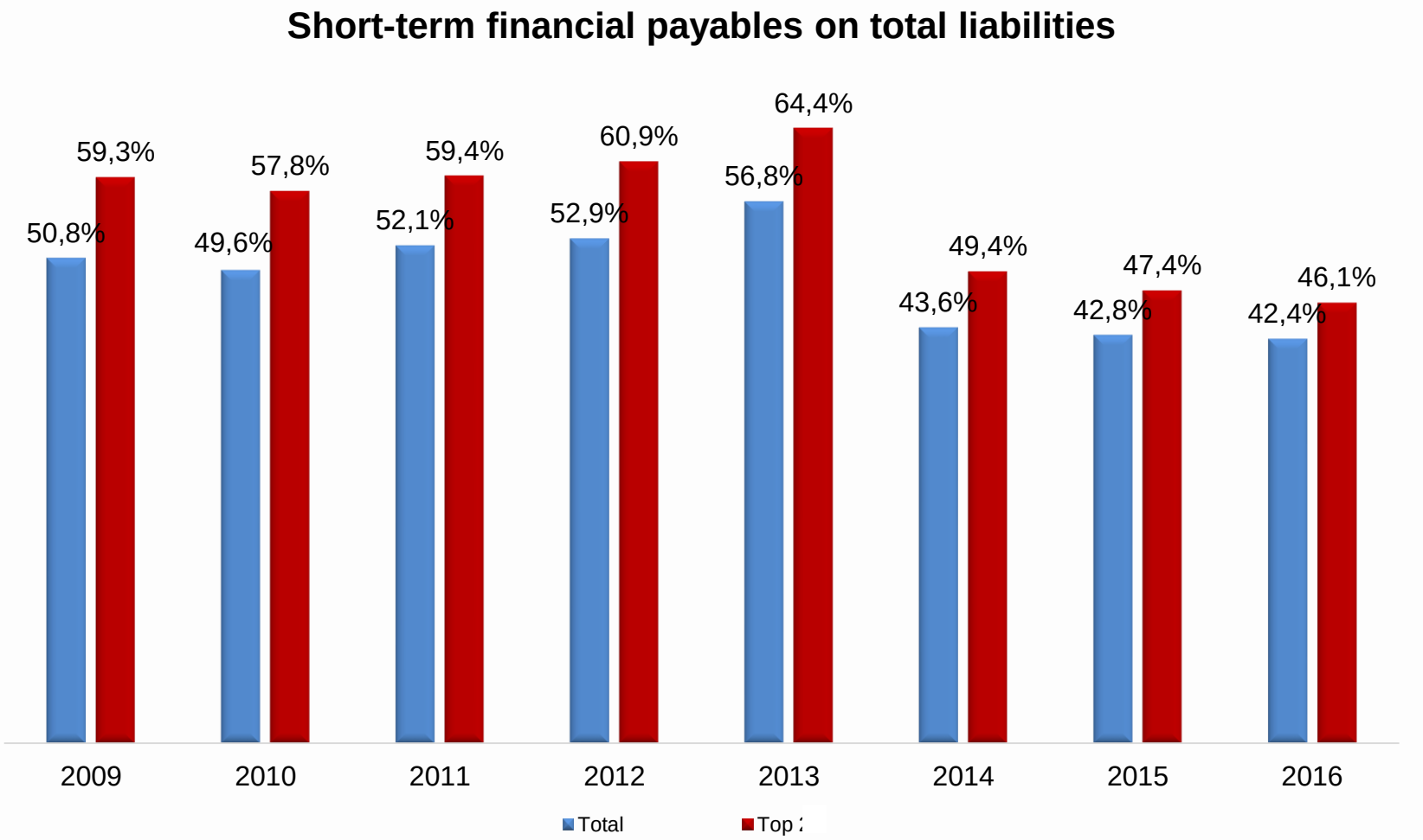
# Financial Structure

- The debt rate of the total sample is lower than the top companies in the industry. There is, however, a decrease in the debt rate for both sizes with particular reference to 2015 and 2016.
- The incidence of financial debts is lower for the entire sample. The incidence of financial debts on liabilities has been affected by a decrease in the last three years considered.

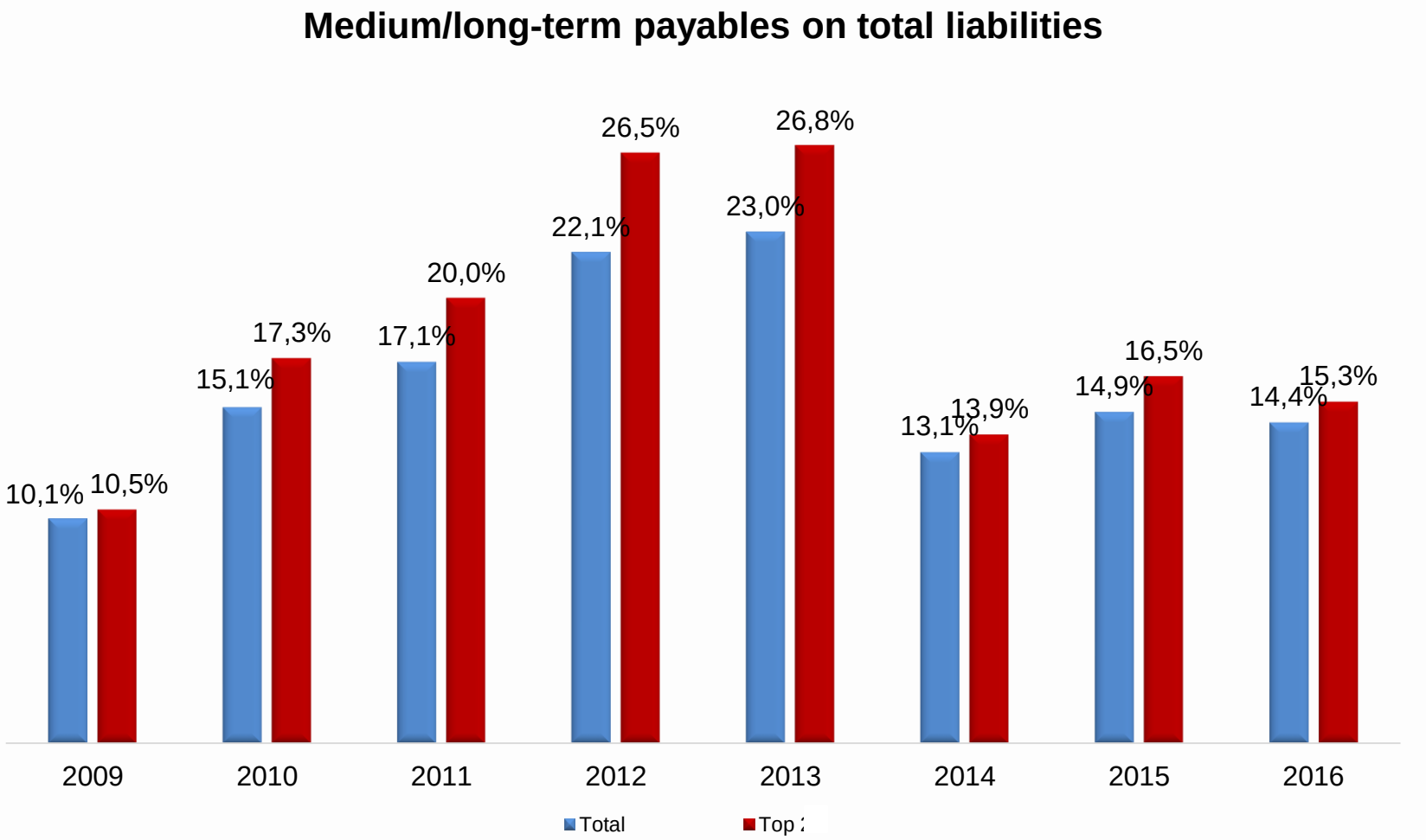
# Financial Structure



# Financial Structure



# Financial Structure



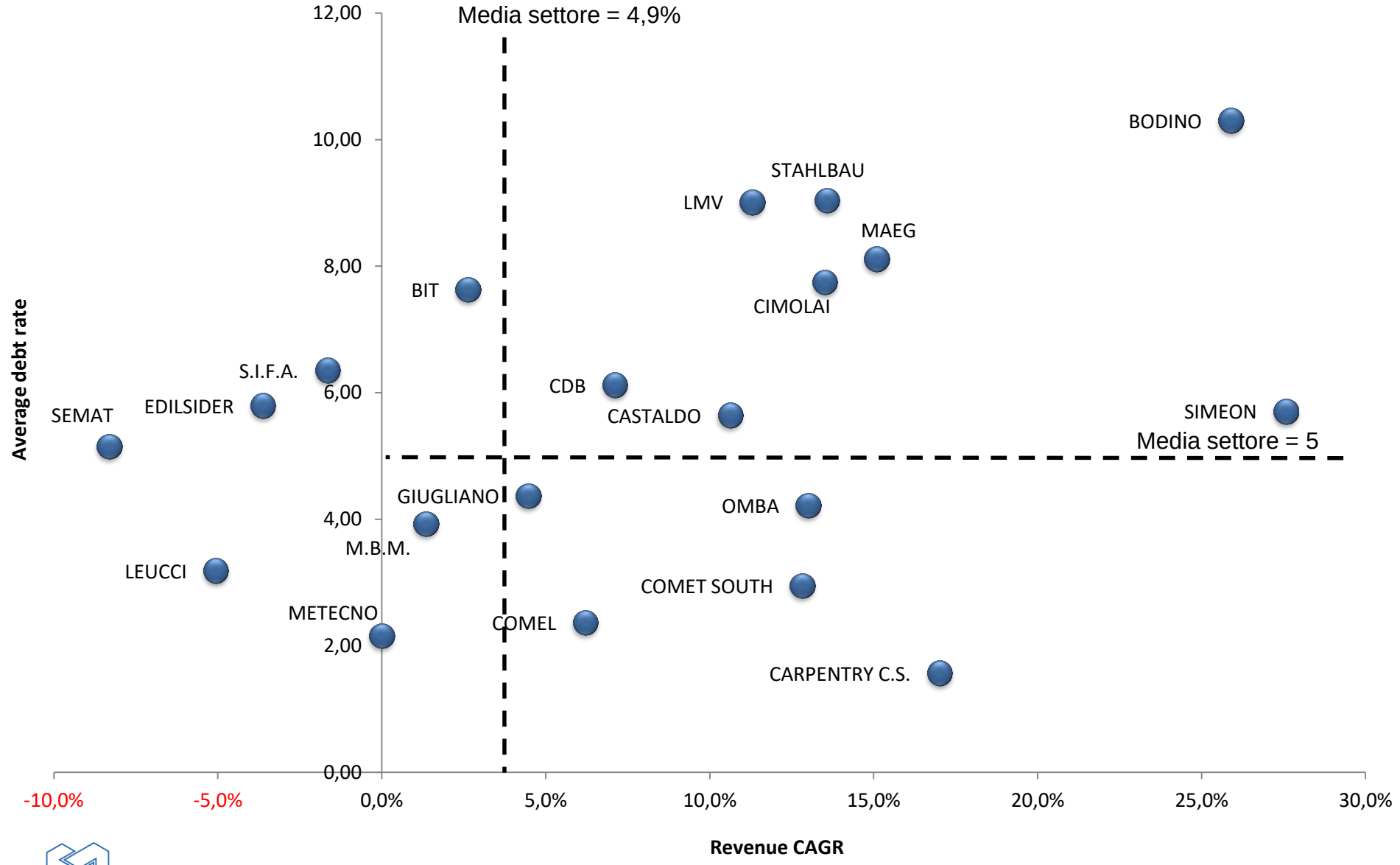
# Sustainability of the business model

- The sustainability of the business models adopted by larger companies can be analyzed by jointly considering the indices of development, profitability and financial strength over a period of several years.
- **Debt and Growth Rate (CAGR Revenues).** Five companies are in the virtuous quadrant, that is, they are those companies that have managed to develop above-average growth while maintaining a lower debt rate. Four companies are in the critical quadrant and only one seems to have a compromised situation from the point of view of the debt rate. A significant number of companies have developed above-average growth, but have a debt rate above the industry average; this is a sustainable situation insofar as the income streams from operations will allow them to pay interest expense and meet commitments to creditors.

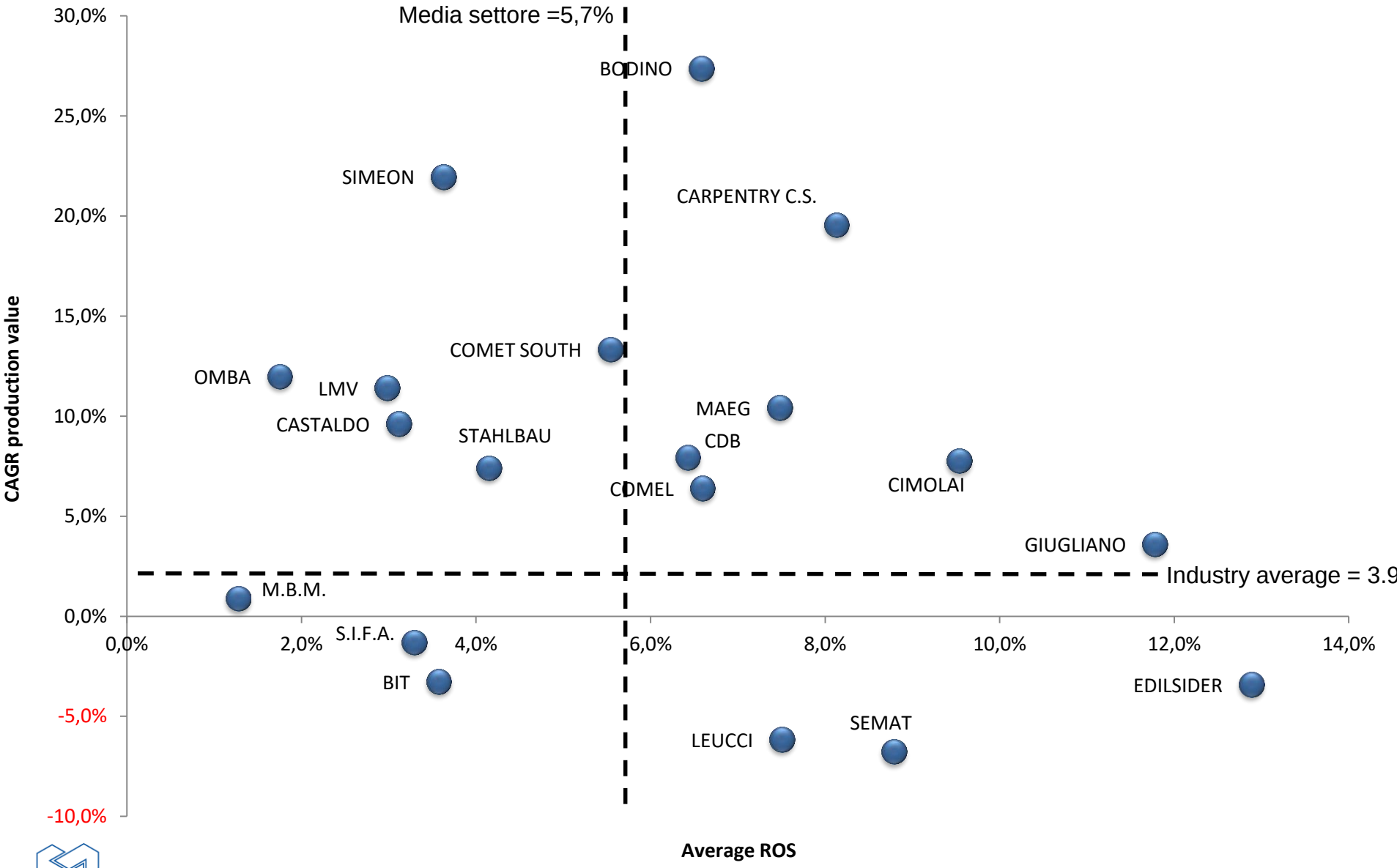
# Sustainability of the business model

- **Growth (CAGR Revenues) and commercial profitability (ROS).** Approximately ¼ of the companies considered are in the virtuous quadrant and are characterized by revenue growth and sales marginality above the industry average. Four companies are in the critical quadrant, yet maintain a positive sales marginality. The remaining part of the companies are characterized by a satisfactory growth in revenues even if the marginality of sales is below the sector average.
- **Debt Rate and Return on Investment (ROIC).** Three companies are in the critical quadrant and only one has a very high rate of indebtedness associated, however, with a return on invested capital close to the industry average. In the virtuous quadrant are four companies that combine low debt with a high return on invested capital. The majority of companies are characterized by a low rate of debt or, at any rate, close to the average, indicating greater attention by companies to their debt and financial situation rather than to their profitability. In general, there is a polarization of companies close to the industry averages.

# Sustainability of the business model

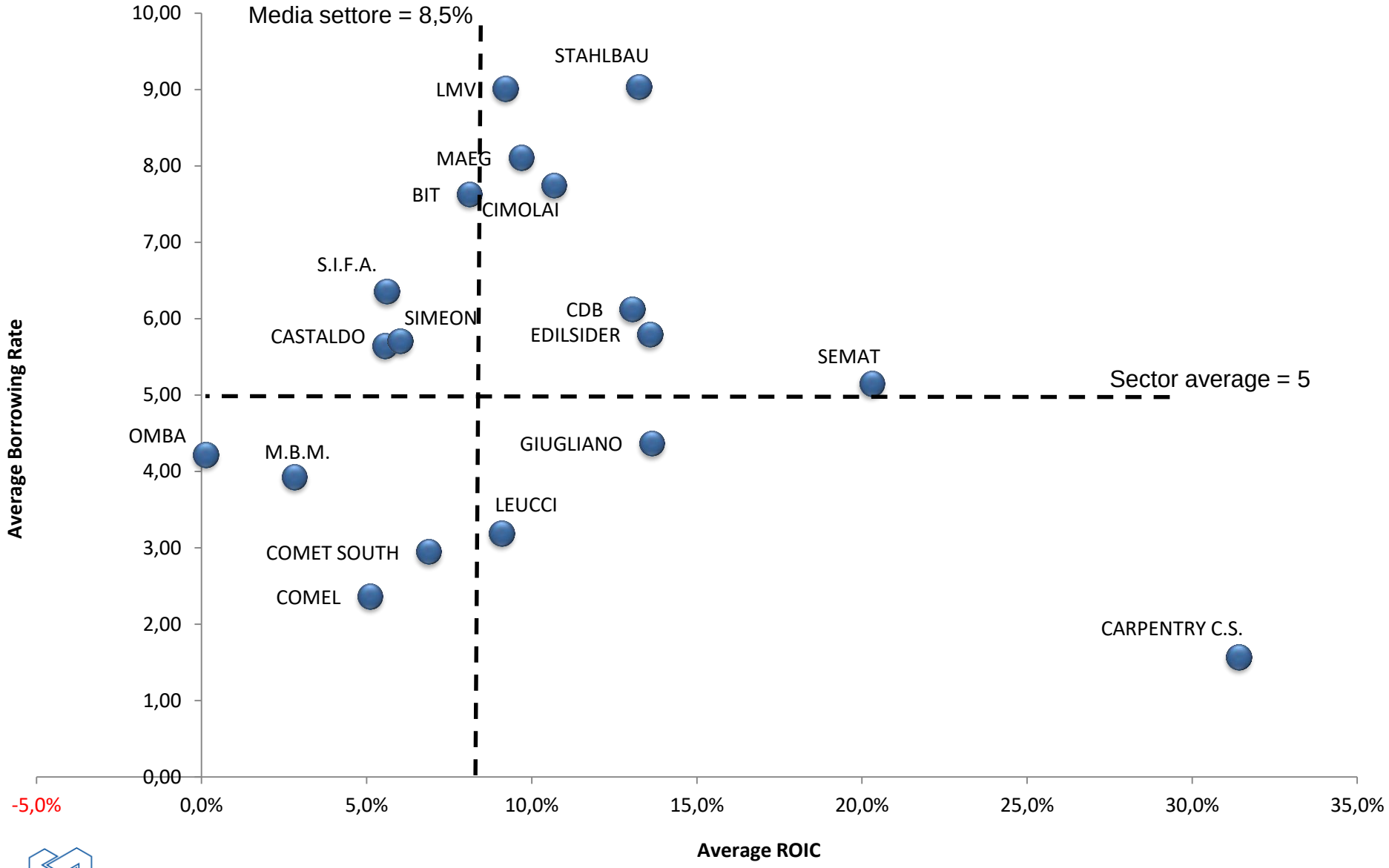


# Sustainability of the business model




Eliminated *outlier* : Metecno.

# Sustainability of the business model




*Outliers* eliminated: Bodino; Metecno.

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This report has been prepared by Carmine Garzia on the basis of data compiled by the Economic Studies Office of UNICMI - Unione Nazionale delle Industrie delle Costruzioni Metalliche dell'Involucro e dei Serramenti.

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